

Reliability of Visual Inspection for Highway Bridges, Volume II: Appendices
Go back to main publications page to access the other sections of this appendix.

APPENDIX J. OBSERVER DATA FORMS

TASK A FIRSTHAND OBSERVATION FORM

1. Inspector ID: _____
2. Start Time: _____
3. End Time: _____
4. General weather condition:
 - ___ 0-20% Cloudy
 - ___ 20-40% Cloudy
 - ___ 40-60% Cloudy
 - ___ 60-80% Cloudy
 - ___ 80-100% Cloudy
 - ___ Hazy
 - ___ Fog
 - ___ Drizzle
 - ___ Steady Rain
 - ___ Thunderstorm
5. Environmental conditions (5 ft above ground under center of superstructure):
 - Temperature (degrees F): ___
 - Humidity (%): ___
 - Wind speed (mph): ___
 - Light intensity (fc): ___
 - Note: Light intensity measured at ground level.
 - Noise level (dB): ___
6. Environmental conditions (measured on center of deck):
 - Light intensity (fc): ___
7. Observer notes:
8. Did the inspector (superstructure):
 - ___ Inspect E girder
 - ___ Inspect W girder
 - ___ Inspect N bearings
 - ___ Inspect S bearings
 - ___ Inspect floorbeams
 - ___ Inspect underside of deck
9. Did the inspector (substructure):
 - ___ Inspect N abutment
 - ___ Sound N abutment
 - ___ Inspect S abutment
 - ___ Sound S abutment
 - ___ Inspect NW wingwall
 - ___ Sound NW wingwall

- ☐ Inspect NE wingwall
- ☐ Sound NE wingwall
- ☐ Inspect SW wingwall
- ☐ Sound SW wingwall
- ☐ Inspect SE wingwall
- ☐ Sound SE wingwall

10. Did the inspector (deck):

- ☐ Inspect E girder
- ☐ Inspect W girder
- ☐ Inspect E curb
- ☐ Sound E curb
- ☐ Inspect W curb
- ☐ Sound W curb
- ☐ Inspect curb/web interface E
- ☐ Inspect curb/web interface W
- ☐ Inspect E girder transverse stiffeners
- ☐ Inspect W girder transverse stiffeners
- ☐ Inspect N transverse expansion joint
- ☐ Inspect S transverse expansion joint
- ☐ Check W overall alignment
- ☐ Check E overall alignment

11. What tools did the inspector use?

- ☐ Masonry Hammer
- ☐ Tape Measure
- ☐ Engr Scale
- ☐ Stepladder
- ☐ Extension Ladder
- ☐ Small Maglite
- ☐ Large Maglite
- ☐ Lantern Flashlight
- ☐ Level as Level
- ☐ Level as Straightedge
- ☐ Chain
- ☐ Binoculars
- ☐ Magnifying Glass
- ☐ Protractor
- ☐ Plumb Bob
- ☐ String
- ☐ Clamps

12. Was the inspector focused on the task?

1	2	3	4	5	6	7	8	9
Very Unfocused							Very Focused	

13. Did the inspector seem rushed?

1	2	3	4	5	6	7	8	9
Not Rushed				Very Rushed				

14. General observer notes:

TASK B FIRSTHAND OBSERVATION FORM

1. Inspector ID: _____

2. Start Time: _____

3. End Time: _____

4. General weather condition:

- ☐ 0-20% Cloudy
- ☐ 20-40% Cloudy
- ☐ 40-60% Cloudy
- ☐ 60-80% Cloudy
- ☐ 80-100% Cloudy
- ☐ Hazy
- ☐ Fog
- ☐ Drizzle
- ☐ Steady Rain
- ☐ Thunderstorm

5. Environmental conditions (5 ft above ground under center of superstructure):

Temperature (degrees F): _____

Humidity (%): _____

Wind speed (mph): _____

Light intensity (fc): _____

Note: Light intensity measured at ground level.

Noise level (dB): _____

6. Environmental conditions (measured on center of deck):

Light intensity (fc): _____

7. Observer notes:

8. Did the inspector (superstructure):

- ☐ Inspect T-beams
- ☐ Sound T-beams
- ☐ Inspect longitudinal expansion joint
- ☐ Inspect underside of deck
- ☐ Sound underside of deck

9. Did the inspector (substructure):

- ☐ Inspect W abutment
- ☐ Sound W abutment
- ☐ Inspect W abutment expansion joint
- ☐ Sound W abutment expansion joint
- ☐ Inspect E abutment
- ☐ Sound E abutment

- ___ Inspect E abutment expansion joint
- ___ Sound E abutment expansion joint
- ___ Inspect NE wingwall
- ___ Sound NE wingwall
- ___ Inspect SE wingwall
- ___ Sound SE wingwall
- ___ Inspect NW wingwall
- ___ Sound NW wingwall
- ___ Inspect SW wingwall
- ___ Sound SW wingwall
- ___ Inspect NE wingwall/abutment joint
- ___ Sound NE wingwall/abutment joint
- ___ Inspect SE wingwall/abutment joint
- ___ Sound SE wingwall/abutment joint
- ___ Inspect NW wingwall/abutment joint
- ___ Sound NW wingwall/abutment joint
- ___ Inspect SW wingwall/abutment joint
- ___ Sound SW wingwall/abutment joint

10. Did the inspector (deck):

- ___ Inspect N parapet
- ___ Sound N parapet
- ___ Inspect S parapet
- ___ Sound S parapet
- ___ Inspect wearing surface
- ___ Inspect W transverse expansion joint
- ___ Inspect E transverse expansion joint

11. What tools did the inspector use?

- ___ Masonry Hammer
- ___ Tape Measure
- ___ Engr Scale
- ___ Stepladder
- ___ Extension Ladder
- ___ Small Maglite
- ___ Large Maglite
- ___ Lantern Flashlight
- ___ Level as Level
- ___ Level as Straightedge
- ___ Chain
- ___ Binoculars
- ___ Magnifying Glass
- ___ Protractor
- ___ Plumb Bob
- ___ String
- ___ Clamps

12. Was the inspector focused on the task?

1	2	3	4	5	6	7	8	9
Very Unfocused					Very Focused			

13. Did the inspector seem rushed?

1	2	3	4	5	6	7	8	9
Not Rushed					Very Rushed			

14. General observer notes:

TASK C FIRSTHAND OBSERVATION FORM

1. Inspector ID: _____

2. Start Time: _____

3. End Time: _____

4. General weather condition:

- ☐ 0-20% Cloudy
- ☐ 20-40% Cloudy
- ☐ 40-60% Cloudy
- ☐ 60-80% Cloudy
- ☐ 80-100% Cloudy
- ☐ Hazy
- ☐ Fog
- ☐ Drizzle
- ☐ Steady Rain
- ☐ Thunderstorm

5. Environmental conditions (5 ft above ground under center of superstructure):

Temperature (degrees F): _____

Humidity (%): _____

Wind speed (mph): _____

Light intensity (fc): _____

Note: Light intensity measured at ground level.

Noise level (dB): _____

6. Environmental conditions (measured on center of deck):

Light intensity (fc): _____

7. Observer notes:

8. Did the inspector (superstructure):

- ☐ Inspect T-beams
- ☐ Sound T-beams
- ☐ Inspect longitudinal expansion joint
- ☐ Inspect underside of deck
- ☐ Sound underside of deck

9. Did the inspector (substructure):

- ☐ Inspect W abutment
- ☐ Sound W abutment
- ☐ Inspect W abutment expansion joint
- ☐ Sound W abutment expansion joint
- ☐ Inspect E abutment
- ☐ Sound E abutment
- ☐ Inspect E abutment expansion joint

- ___ Sound E abutment expansion joint
- ___ Inspect NE wingwall
- ___ Sound NE wingwall
- ___ Inspect SE wingwall
- ___ Sound SE wingwall
- ___ Inspect NW wingwall
- ___ Sound NW wingwall
- ___ Inspect SW wingwall
- ___ Sound SW wingwall
- ___ Inspect NE wingwall/abutment joint
- ___ Sound NE wingwall/abutment joint
- ___ Inspect SE wingwall/abutment joint
- ___ Sound SE wingwall/abutment joint
- ___ Inspect NW wingwall/abutment joint
- ___ Sound NW wingwall/abutment joint
- ___ Inspect SW wingwall/abutment joint
- ___ Sound SW wingwall/abutment joint

10. Did the inspector (deck):

- ___ Inspect N parapet
- ___ Sound N parapet
- ___ Inspect S parapet
- ___ Sound S parapet
- ___ Inspect wearing surface
- ___ Inspect W transverse expansion joint
- ___ Inspect E transverse expansion joint

11. What tools did the inspector use?

- ___ Masonry Hammer
- ___ Tape Measure
- ___ Engr Scale
- ___ Stepladder
- ___ Extension Ladder
- ___ Small Maglite
- ___ Large Maglite
- ___ Lantern Flashlight
- ___ Level as Level
- ___ Level as Straightedge
- ___ Chain
- ___ Binoculars
- ___ Magnifying Glass
- ___ Protractor
- ___ Plumb Bob
- ___ String
- ___ Clamps

12. Was the inspector focused on the task?

1	2	3	4	5	6	7	8	9
Very Unfocused					Very Focused			

13. Did the inspector seem rushed?

1	2	3	4	5	6	7	8	9
Not Rushed					Very Rushed			

14. General observer notes:

TASK D FIRSTHAND OBSERVATION FORM

1. Inspector ID: _____

2. Start Time: _____

3. End Time: _____

4. General weather condition:

- ☐ 0-20% Cloudy
- ☐ 20-40% Cloudy
- ☐ 40-60% Cloudy
- ☐ 60-80% Cloudy
- ☐ 80-100% Cloudy
- ☐ Hazy
- ☐ Fog
- ☐ Drizzle
- ☐ Steady Rain
- ☐ Thunderstorm

5. Environmental conditions (5 ft above ground under center of superstructure):

Temperature (degrees F): _____

Humidity (%): _____

Wind speed (mph): _____

Light intensity (fc): _____

Note: Light intensity measured at ground level.

Noise level (dB): _____

6. Environmental conditions (measured on center of deck):

Light intensity (fc): _____

7. Observer notes:

8. Did the inspector (superstructure):

- ☐ Inspect arch for cracks
- ☐ Inspect longitudinal expansion joint
- ☐ Inspect N elevation above arch
- ☐ Inspect S elevation above arch

9. Did the inspector (substructure):

- ☐ Inspect W abutment
- ☐ Sound W abutment
- ☐ Inspect E abutment
- ☐ Sound E abutment
- ☐ Inspect SW wingwall
- ☐ Sound SW wingwall
- ☐ Inspect SE wingwall
- ☐ Sound SE wingwall

- ☐ Inspect NW wingwall
- ☐ Sound NW wingwall
- ☐ Inspect NE wingwall
- ☐ Sound NE wingwall

10. Did the inspector (deck):

- ☐ Inspect N parapet
- ☐ Sound N parapet
- ☐ Inspect S parapet
- ☐ Sound S parapet
- ☐ Inspect wearing surface
- ☐ Inspect W transverse expansion joint
- ☐ Inspect E transverse expansion joint

11. What tools did the inspector use?

- ☐ Masonry Hammer
- ☐ Tape Measure
- ☐ Engr Scale
- ☐ Stepladder
- ☐ Extension Ladder
- ☐ Small Maglite
- ☐ Large Maglite
- ☐ Lantern Flashlight
- ☐ Level as Level
- ☐ Level as Straightedge
- ☐ Chain
- ☐ Binoculars
- ☐ Magnifying Glass
- ☐ Protractor
- ☐ Plumb Bob
- ☐ String
- ☐ Clamps

12. Was the inspector focused on the task?

1	2	3	4	5	6	7	8	9
Very Unfocused							Very Focused	

13. Did the inspector seem rushed?

1	2	3	4	5	6	7	8	9
Not Rushed							Very Rushed	

14. General observer notes:

TASK E FIRSTHAND OBSERVATION FORM

1. Inspector ID: _____

2. Start Time: _____

3. End Time: _____

4. General weather condition:

- ☐ 0-20% Cloudy
- ☐ 20-40% Cloudy
- ☐ 40-60% Cloudy
- ☐ 60-80% Cloudy
- ☐ 80-100% Cloudy
- ☐ Hazy
- ☐ Fog
- ☐ Drizzle
- ☐ Steady Rain
- ☐ Thunderstorm

5. Environmental conditions (5 ft above ground at center of west base of abutment):

Temperature (degrees F): _____

Humidity (%): _____

Wind speed (mph): _____

Light intensity (fc): _____

Note: Light intensity measured at ground level.

Noise level (dB): _____

6. Environmental conditions (measured on center of deck):

Light intensity (fc): _____

7. Observer notes:

8. Did the inspector (superstructure):

- ☐ Inspect superstructure with binoculars
- ☐ Inspect bearings (elevated)
- ☐ Check bearing rotations (elevated)

9. Did the inspector (substructure):

- ☐ Inspect E abutment
- ☐ Sound E abutment
- ☐ Inspect W abutment
- ☐ Sound W abutment
- ☐ Inspect NE wingwall
- ☐ Sound NE wingwall
- ☐ Inspect NW wingwall
- ☐ Sound NW wingwall
- ☐ Inspect SE wingwall

- ☐ Sound SE wingwall
- ☐ Inspect SW wingwall
- ☐ Sound SW wingwall

10. Did the inspector (deck):

- ☐ Inspect longitudinal joint
- ☐ Inspect E expansion joint
- ☐ Inspect W expansion joint
- ☐ Inspect N parapet
- ☐ Sound N parapet
- ☐ Inspect S parapet
- ☐ Sound S parapet
- ☐ Inspect deck surface
- ☐ Check W alignment
- ☐ Check E alignment

11. What tools did the inspector use?

- ☐ Masonry Hammer
- ☐ Tape Measure
- ☐ Engr Scale
- ☐ Stepladder
- ☐ Extension Ladder
- ☐ Small Maglite
- ☐ Large Maglite
- ☐ Lantern Flashlight
- ☐ Level as Level
- ☐ Level as Straightedge
- ☐ Chain
- ☐ Binoculars
- ☐ Magnifying Glass
- ☐ Protractor
- ☐ Plumb Bob
- ☐ String
- ☐ Clamps

12. Was the inspector focused on the task?

1	2	3	4	5	6	7	8	9
Very Unfocused							Very Focused	

13. Did the inspector seem rushed?

1	2	3	4	5	6	7	8	9
Not Rushed							Very Rushed	

14. General observer notes:

TASK F FIRSTHAND OBSERVATION FORM

1. Inspector ID: _____

2. Start Time: _____

3. End Time: _____

4. General weather condition:

- ☐ 0-20% Cloudy
- ☐ 20-40% Cloudy
- ☐ 40-60% Cloudy
- ☐ 60-80% Cloudy
- ☐ 80-100% Cloudy
- ☐ Hazy
- ☐ Fog
- ☐ Drizzle
- ☐ Steady Rain
- ☐ Thunderstorm

5. Environmental condition (elevated near SW superstructure):

Temperature (degrees F): _____

Humidity (%): _____

Wind speed (mph): _____

Light intensity (fc): _____

Note: Measured at web/flange/stiffener connection on interior of exterior girder.

Noise level (dB): _____

6. Observer notes:

7. Did the inspector (from lift):

- ☐ Inspect behind end diaphragm
- ☐ Inspect outer bearing
- ☐ Inspect middle bearing
- ☐ Inspect inner bearing
- ☐ Inspect end diaphragm connections
- ☐ Inspect intermediate diaphragm-web connections
- ☐ Inspect sway frame-web connections
- ☐ Inspect bottom flange rivets
- ☐ Inspect fascia girder
- ☐ Inspect middle girder
- ☐ Inspect inner girder

8. Did the inspector (from ladder):

- ☐ Inspect behind end diaphragm
- ☐ Inspect outer bearing
- ☐ Inspect middle bearing
- ☐ Inspect inner bearing

- ___ Inspect end diaphragm connections
- ___ Inspect intermediate diaphragm-web connections
- ___ Inspect sway frame-web connections (from ladder)
- ___ Inspect bottom flange rivets
- ___ Inspect fascia girder
- ___ Inspect middle girder
- ___ Inspect inner girder

9. What tools did the inspector use?

- ___ Masonry Hammer
- ___ Tape Measure
- ___ Engr Scale
- ___ Stepladder
- ___ Extension Ladder
- ___ Small Maglite
- ___ Large Maglite
- ___ Lantern Flashlight
- ___ Level as Level
- ___ Level as Straightedge
- ___ Chain
- ___ Binoculars
- ___ Magnifying Glass
- ___ Protractor
- ___ Plumb Bob
- ___ String
- ___ Clamps

10. Was the inspector focused on the task?

1	2	3	4	5	6	7	8	9
Very Unfocused							Very Focused	

11. Did the inspector seem rushed?

1	2	3	4	5	6	7	8	9
Not Rushed							Very Rushed	

12. How comfortable was the inspector with the working height?

1	2	3	4	5	6	7	8	9
Very Uncomfortable							Very Comfortable	

13. How comfortable was the inspector with the lift?

1	2	3	4	5	6	7	8	9
Very Uncomfortable							Very Comfortable	

14. Quality of boom lift operation?

1	2	3	4	5
Poor		Average		Stellar

15. General observer notes:

TASK G FIRSTHAND OBSERVATION FORM

1. Inspector ID: _____

2. Start Time: _____

3. End Time: _____

4. General weather condition:

- ___ 0-20% Cloudy
- ___ 20-40% Cloudy
- ___ 40-60% Cloudy
- ___ 60-80% Cloudy
- ___ 80-100% Cloudy
- ___ Hazy
- ___ Fog
- ___ Drizzle
- ___ Steady Rain
- ___ Thunderstorm

5. Environmental conditions (5 ft above ground level; center of in-depth span):

Temperature (degrees F): _____

Humidity (%): _____

Wind speed (mph): _____

Light intensity (fc): _____

Note: Light intensity measured at ground level.

Noise level (dB): _____

6. Environmental conditions (measured on web of interior girder at south abutment):

Note: Only measure if inspector climbs south abutment.

Light intensity (fc): _____

7. Observer notes:

8. Did the inspector (superstructure):

- ___ Inspect Span 5 with binoculars
- ___ Inspect Span 6 with binoculars
- ___ Inspect Span 7 with binoculars
- ___ Inspect Span 8 with binoculars
- ___ Inspect Pier 4 bearing
- ___ Inspect Pier 5 bearing
- ___ Inspect Pier 6 bearing
- ___ Inspect Pier 7 bearing

9. Did the inspector (substructure):

- ___ Inspect Pier 4
- ___ River low enough to sound
- ___ Sound Pier 4

- ___ Inspect Pier 5
- ___ Sound Pier 5
- ___ Inspect Pier 6
- ___ Sound Pier 6
- ___ Inspect Pier 7
- ___ Sound Pier 7
- ___ Climb up to S abutment
- ___ Sound abutment seat
- ___ Sound abutment backwall

10. Did the inspector (deck):

- ___ Inspect S expansion joint from below
- ___ Inspect S expansion joint from above
- ___ Check W alignment

11. What tools did the inspector use?

- ___ Masonry Hammer
- ___ Tape Measure
- ___ Engr Scale
- ___ Stepladder
- ___ Extension Ladder
- ___ Small Maglite
- ___ Large Maglite
- ___ Lantern Flashlight
- ___ Level as Level
- ___ Level as Straightedge
- ___ Chain
- ___ Binoculars
- ___ Magnifying Glass
- ___ Protractor
- ___ Plumb Bob
- ___ String
- ___ Clamps

12. Was the inspector focused on the task?

1	2	3	4	5	6	7	8	9
Very Unfocused					Very Focused			

13. Did the inspector seem rushed?

1	2	3	4	5	6	7	8	9
Not Rushed					Very Rushed			

14. General observer notes:

TASK H FIRSTHAND OBSERVATION FORM

1. Inspector ID: _____

2. Start Time: _____

3. End Time: _____

4. General weather condition:

- ☐ 0-20% Cloudy
- ☐ 20-40% Cloudy
- ☐ 40-60% Cloudy
- ☐ 60-80% Cloudy
- ☐ 80-100% Cloudy
- ☐ Hazy
- ☐ Fog
- ☐ Drizzle
- ☐ Steady Rain
- ☐ Thunderstorm

5. Environmental conditions (measured elevated near mid-span):

Temperature (degrees F): _____

Humidity (%): _____

Wind speed (mph): _____

Light intensity (fc): _____

Note: Measured at web/bottom flange/stiffener interface on interior of exterior girder.

Noise level (dB): _____

6. Observer notes:

7. Inspection checklist:

- ☐ Inspect N flange transitions
- ☐ Inspect S flange transitions
- ☐ Inspect N Girder 3 splice plates
- ☐ Inspect N Girder 4 splice plates
- ☐ Inspect S Girder 3 splice plates
- ☐ Inspect S Girder 4 splice plates
- ☐ Inspect Girder 4 stiffener retrofits
- ☐ Inspect <25% of utility welds
- ☐ Inspect 25-75% of utility welds
- ☐ Inspect >75% of utility welds
- ☐ Inspect a few drain tack welds
- ☐ Inspect most drain tack welds
- ☐ Inspect <25% of lateral connection gusset plate welds
- ☐ Inspect 25-75% of lateral connection gusset plate welds
- ☐ Inspect >75% of lateral connection gusset plate welds
- ☐ Inspect stiffener-to-web connection (bottom near mid-span)
- ☐ Inspect stiffener-to-web connection (top near pier)

8. Sounding checklist:

- ___ Sound 1-3 bolts per splice
- ___ Sound 4-10 bolts per splice
- ___ Sound 10+ bolts per splice
- ___ Sound a few lateral connection bolts
- ___ Sound bolts on more than half of the lateral connections

9. What tools did the inspector use?

- ___ Masonry Hammer
- ___ Tape Measure
- ___ Engr Scale
- ___ Stepladder
- ___ Extension Ladder
- ___ Small Maglite
- ___ Large Maglite
- ___ Lantern Flashlight
- ___ Level as Level
- ___ Level as Straightedge
- ___ Chain
- ___ Binoculars
- ___ Magnifying Glass
- ___ Protractor
- ___ Plumb Bob
- ___ String
- ___ Clamps

10. Was the inspector focused on the task?

	1	2	3	4	5	6	7	8	9	
	Very Unfocused								Very Focused	

11. Did the inspector seem rushed?

1	2	3	4	5	6	7	8	9
Not Rushed				Very Rushed				

12. In general, approximately how close did the inspector get to the welds?

(Note: Record amount in inches.) _____

13. Was the inspector's viewing angle varied while inspecting the welds?

1 2 3 4 5 6 7 8 9
Never Always

14. How comfortable was the inspector with the working height?

1 2 3 4 5 6 7 8 9
Not Comfortable Very Comfortable

15. How comfortable was the inspector with the lift?

1	2	3	4	5	6	7	8	9
Not Comfortable							Very Comfortable	

16. Quality of boom lift operation?

1	2	3	4	5
Poor		Average		Stellar

17. General observer notes:

TASK I FIRSTHAND OBSERVATION FORM

1. Team ID: _____
2. Start Time: _____
3. End Time: _____
4. General weather condition:
 - ___ 0-20% Cloudy
 - ___ 20-40% Cloudy
 - ___ 40-60% Cloudy
 - ___ 60-80% Cloudy
 - ___ 80-100% Cloudy
 - ___ Hazy
 - ___ Fog
 - ___ Drizzle
 - ___ Steady Rain
 - ___ Thunderstorm
5. Environmental conditions (measured under south end of superstructure):
 - Temperature (degrees F): ___
 - Humidity (%): ___
 - Wind speed (mph): ___
 - Light intensity (fc): ___
 - Note: Measured at web/bottom flange/diaphragm interface inside west exterior girder.
 - Noise level (dB): ___
6. Environmental conditions (measured on center of deck of center span):
 - Light intensity (fc): ___
7. General observer notes:
8. Observer notes for Inspector #1:
9. Observer notes for Inspector #2:
10. Did the team (superstructure):
 - ___ Check S bearing location
 - ___ Check S bearing rotation
 - ___ Check middle bearing location
 - ___ Check middle bearing rotation
 - ___ Check N bearing location
 - ___ Check N bearing rotation
 - ___ Inspect coverplate terminations S span
 - ___ Inspect coverplate terminations middle span
 - ___ Check for missing/loose bolts S span
 - ___ Check for missing/loose bolts middle span

- ___ Inspect diaphragm/web weld connection S span
- ___ Inspect diaphragm/web weld connection middle span
- ___ Inspect underside of deck S span
- ___ Inspect underside of deck middle span

11. Did the team (substructure):

- ___ Inspect S pier cap
- ___ Sound S pier cap
- ___ Inspect N pier cap
- ___ Sound N pier cap
- ___ Inspect S pier columns
- ___ Sound S pier columns
- ___ Inspect N pier columns
- ___ Sound N pier columns
- ___ Inspect S abutment
- ___ Sound S abutment

12. Did the team (deck):

- ___ Sound deck (masonry hammer)
- ___ Drag deck (partial)
- ___ Drag deck (in-depth)
- ___ Sound W parapet
- ___ Sound E parapet
- ___ Inspect S expansion joint
- ___ Inspect middle deck joint
- ___ Inspect N deck joint
- ___ Check W overall alignment
- ___ Check E overall alignment

13. What tools did the team use?

- ___ Masonry Hammer
- ___ Tape Measure
- ___ Engr Scale
- ___ Stepladder
- ___ Extension Ladder
- ___ Small Maglite
- ___ Large Maglite
- ___ Lantern Flashlight
- ___ Level as Level
- ___ Level as Straightedge
- ___ Chain
- ___ Binoculars
- ___ Magnifying Glass
- ___ Protractor
- ___ Plumb Bob
- ___ String

___ Clamps

14. Was the team focused on the task?

1	2	3	4	5	6	7	8	9
Very Unfocused							Very Focused	

15. Did the team seem rushed?

1	2	3	4	5	6	7	8	9
Not Rushed							Very Rushed	

16. General observer notes:

TASK J FIRSTHAND OBSERVATION FORM

1. Team ID: _____
2. Start Time: _____
3. End Time: _____
4. General weather condition:
 - ___ 0-20% Cloudy
 - ___ 20-40% Cloudy
 - ___ 40-60% Cloudy
 - ___ 60-80% Cloudy
 - ___ 80-100% Cloudy
 - ___ Hazy
 - ___ Fog
 - ___ Drizzle
 - ___ Steady Rain
 - ___ Thunderstorm
5. Environmental conditions (measured 5 ft above deck at center of center span):
 - Temperature (degrees F): ___
 - Humidity (%): ___
 - Wind speed (mph): ___
 - Light intensity (fc): ___
 - Note: Light intensity measured at ground level.
 - Noise level (dB): ___
6. General observer notes:
7. Observer notes for Inspector #1:
8. Observer notes for Inspector #2:
9. Did the team:
 - ___ Chain drag the deck
 - ___ Selectively use the masonry hammer
 - ___ Focus on areas for detailed mapping
10. What tools did the team use?
 - ___ Masonry Hammer
 - ___ Tape Measure
 - ___ Engr Scale
 - ___ Stepladder
 - ___ Extension Ladder
 - ___ Small Maglite
 - ___ Large Maglite
 - ___ Lantern Flashlight

- ___ Level as Level
- ___ Level as Straightedge
- ___ Chain
- ___ Binoculars
- ___ Magnifying Glass
- ___ Protractor
- ___ Plumb Bob
- ___ String
- ___ Clamps

11. Was the team focused on the task?

1	2	3	4	5	6	7	8	9
Very Unfocused								Very Focused

12. Did the team seem rushed?

1	2	3	4	5	6	7	8	9
Not Rushed								Very Rushed

13. General observer notes:

APPENDIX K. FIELD INSPECTION NOTEBOOK

Visual Inspection Study

Inspector Field Notes

Inspector ID Number: _____



Federal Highway Administration
U.S. Department of Transportation

Turner-Fairbank Highway Research Center
6300 Georgetown Pike
McLean, Virginia 22101



Wiss, Janney, Elstner Associates, Inc.
Engineers, Architects, Material Scientists

225 Peachtree Street, N.E., Suite 1600
Atlanta, Georgia 30303
(404) 577-7444 fax: (404) 577-0066

Task A

Task A

Task A

Task A

Task A

Task A

Task A

Task A

TASK A

Bridge B521

Comments: _____

[illegible]

Inspector ID:

Date:

TASK A
Bridge B521

OVERALL SUPERSTRUCTURE CONDITION RATING: N 9 8 7 6 5 4 3 2 1 0

Comments: _____

<u>Superstructure Elements</u>	<u>Rating</u>											<u>Remarks</u>
Stringers	N	9	8	7	6	5	4	3	2	1	0	_____
Floorbeams	N	9	8	7	6	5	4	3	2	1	0	_____
Floor System Bracing	N	9	8	7	6	5	4	3	2	1	0	_____
Multibeams	N	9	8	7	6	5	4	3	2	1	0	_____
Girders	N	9	8	7	6	5	4	3	2	1	0	_____
Arches	N	9	8	7	6	5	4	3	2	1	0	_____
Cables	N	9	8	7	6	5	4	3	2	1	0	_____
Paint	N	9	8	7	6	5	4	3	2	1	0	_____
Bearing Devices	N	9	8	7	6	5	4	3	2	1	0	_____
Connections	N	9	8	7	6	5	4	3	2	1	0	_____
Welds	N	9	8	7	6	5	4	3	2	1	0	_____
_____	N	9	8	7	6	5	4	3	2	1	0	_____
_____	N	9	8	7	6	5	4	3	2	1	0	_____

Timber Decay _____
Concrete Deterioration _____
Steel Corrosion _____
Collision Damage _____
LL Deflection _____
Vibration _____
Member Alignment _____
Utilities _____

Notes: _____

Inspector ID:

Date:

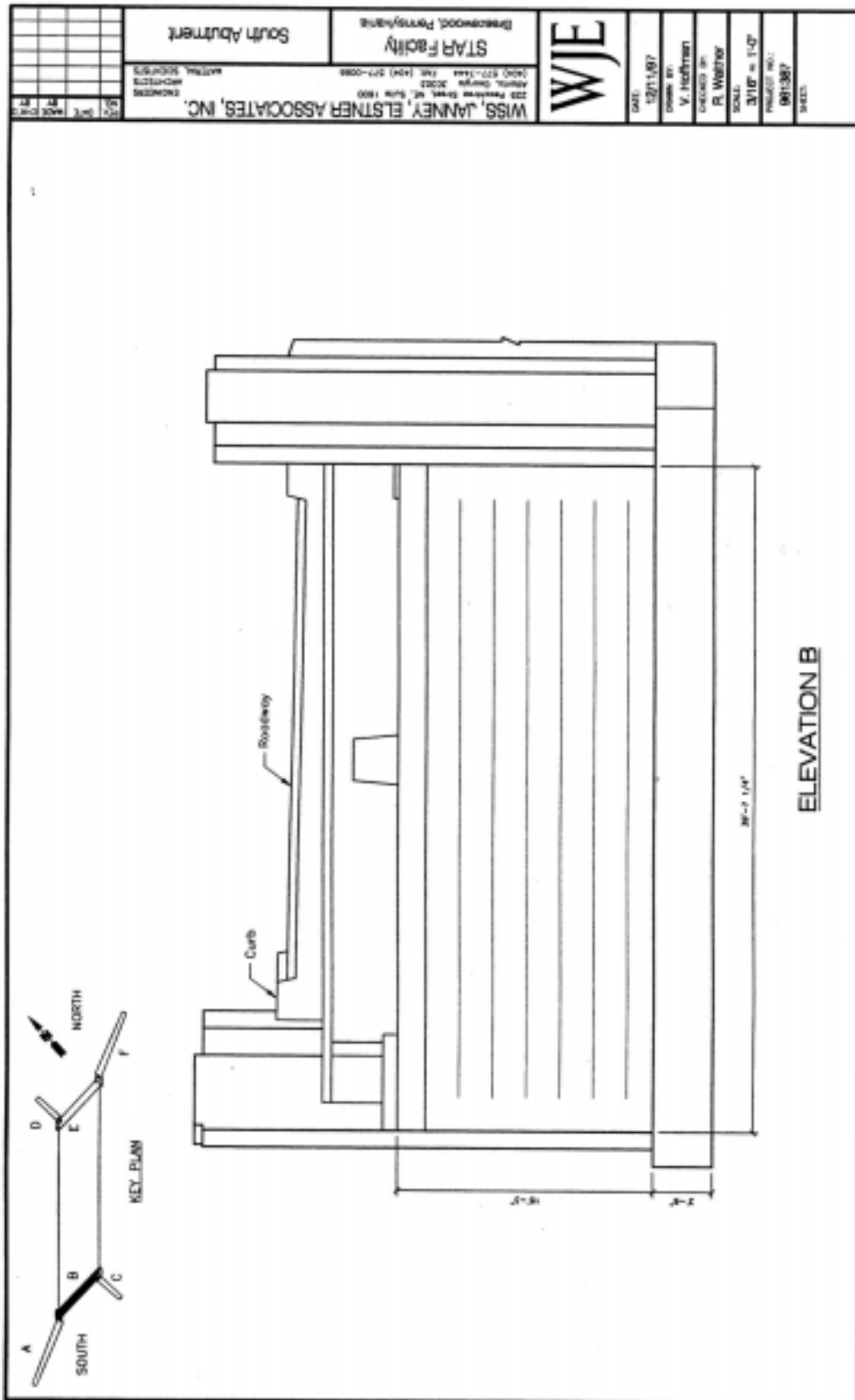
TASK A
Bridge B521

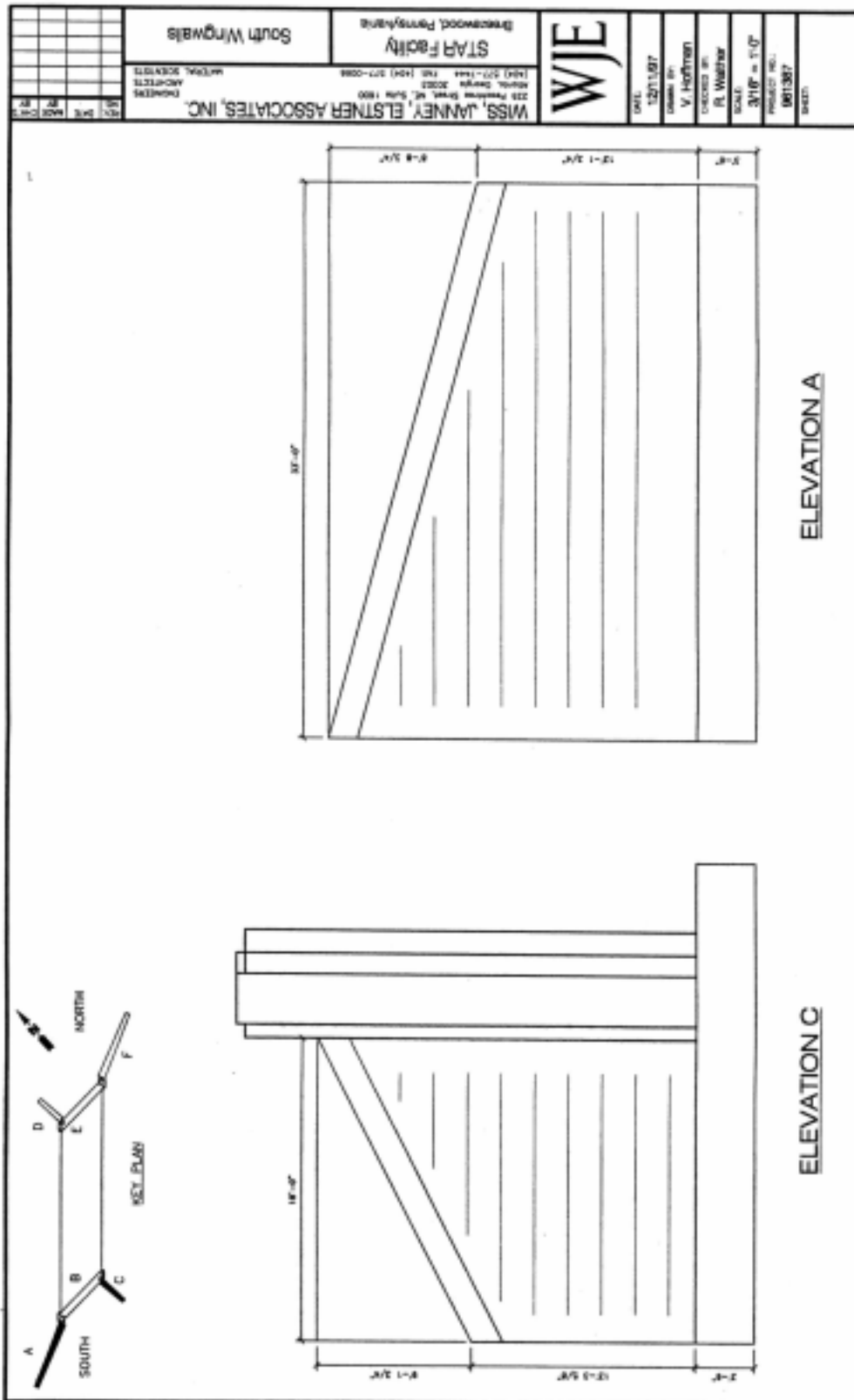
OVERALL SUBSTRUCTURE CONDITION RATING: N 9 8 7 6 5 4 3 2 1 0

Comments: _____

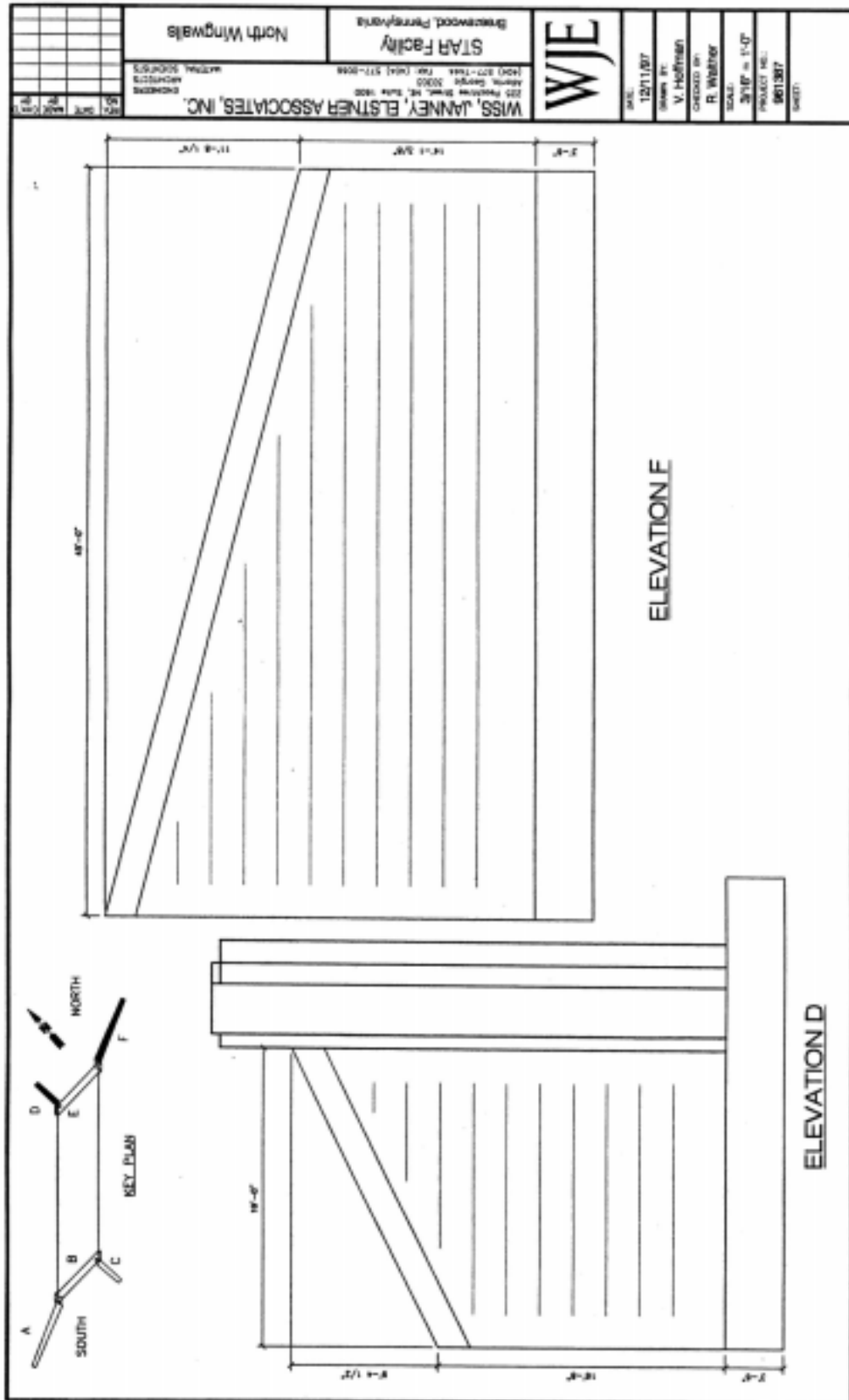
<u>Substructure Elements</u>		<u>Rating</u>										<u>Remarks</u>	
Abutments		N	9	8	7	6	5	4	3	2	1	0	
	Piles	N	9	8	7	6	5	4	3	2	1	0	
	Footing	N	9	8	7	6	5	4	3	2	1	0	
	Stem	N	9	8	7	6	5	4	3	2	1	0	
	Bearing Seat	N	9	8	7	6	5	4	3	2	1	0	
	Backwall	N	9	8	7	6	5	4	3	2	1	0	
	Wingwalls	N	9	8	7	6	5	4	3	2	1	0	
Piers and Bents		N	9	8	7	6	5	4	3	2	1	0	
	Piles	N	9	8	7	6	5	4	3	2	1	0	
	Footing	N	9	8	7	6	5	4	3	2	1	0	
	Columns/Stem	N	9	8	7	6	5	4	3	2	1	0	
	Cap	N	9	8	7	6	5	4	3	2	1	0	
		N	9	8	7	6	5	4	3	2	1	0	
		N	9	8	7	6	5	4	3	2	1	0	
Scour/Undermining													
Settlement													
Substructure Protection													
Collision Damage													
High-water Mark													
Concrete Deterioration													
Steel Corrosion													
Paint													

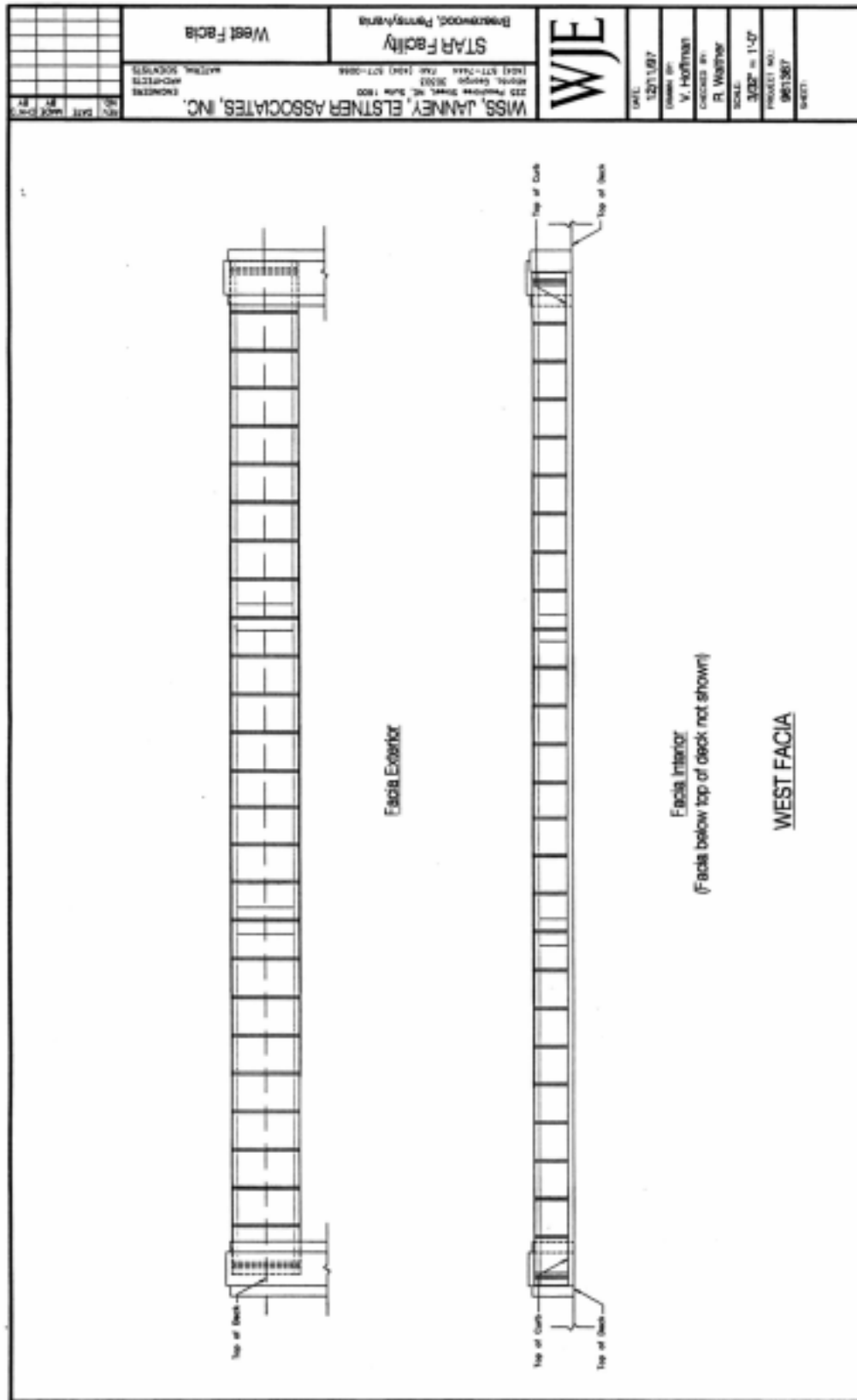
Notes: _____



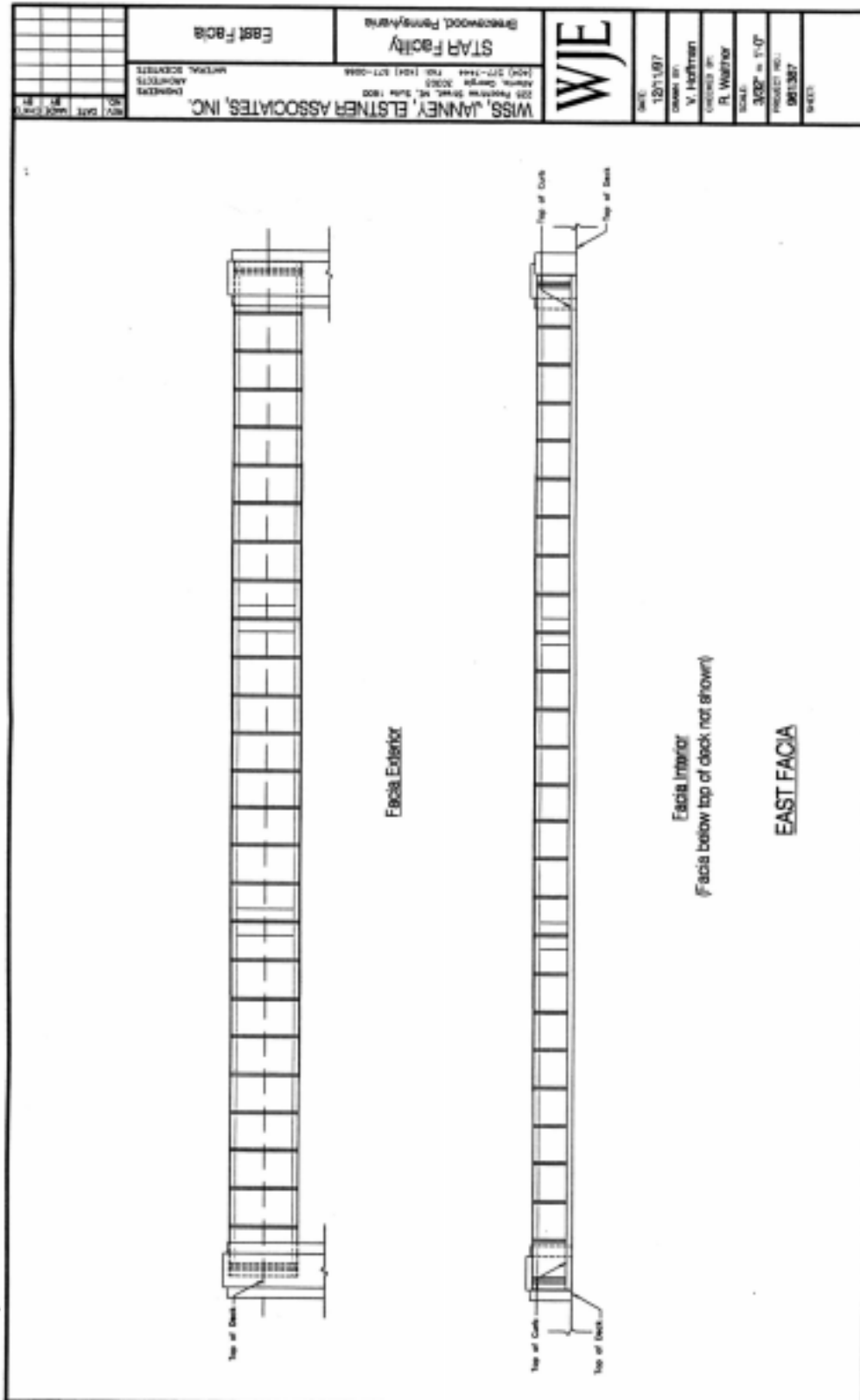


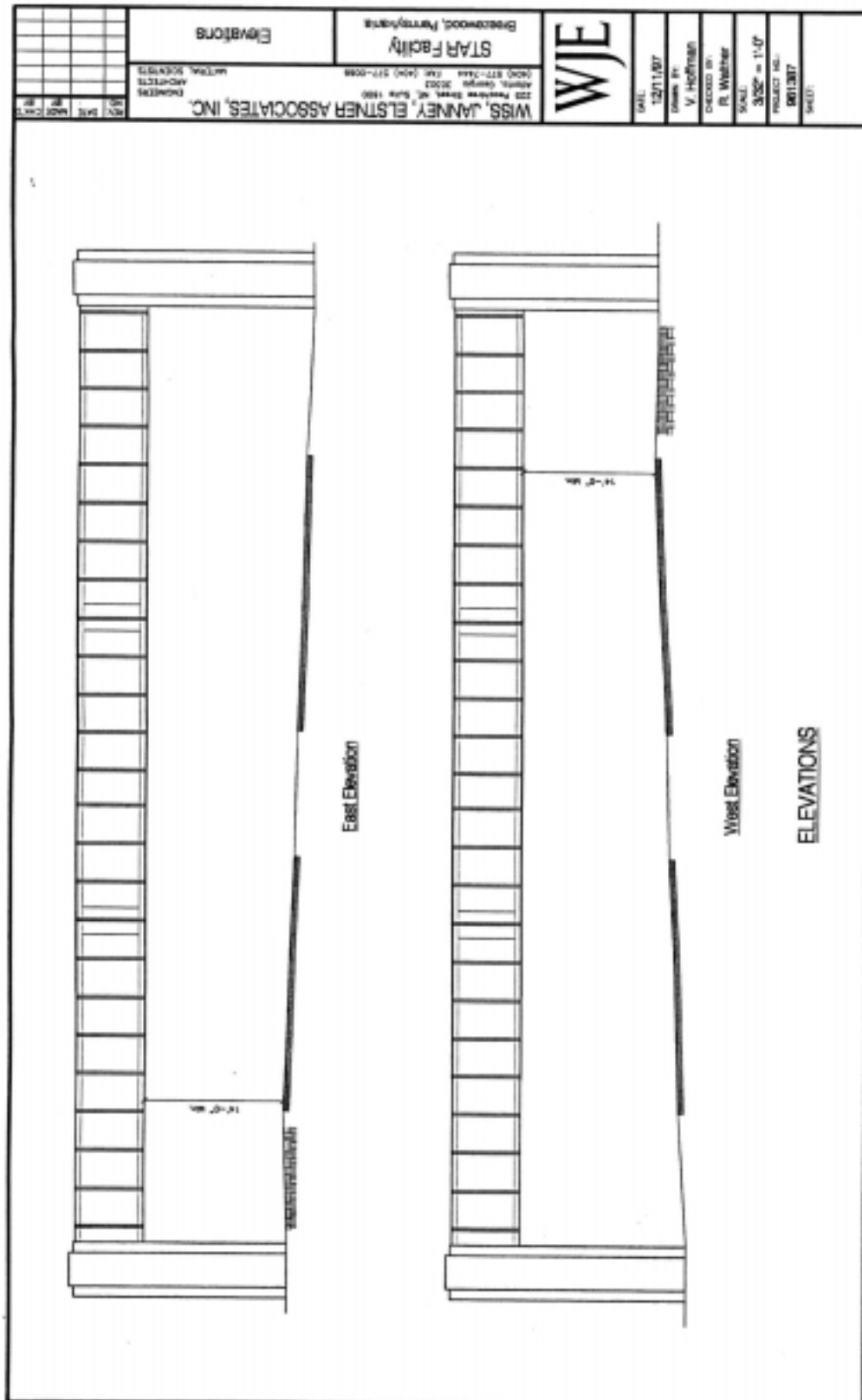
WJE 225 Riverside Drive, 20th Floor New York, New York 10022 (212) 512-1000 (212) 512-1001 (212) 512-1002		STAR Facility Lancaster, Pennsylvania		South Wingwals	
WISS, JANNEY, ELSTNER ASSOCIATES, INC. 225 Riverside Drive, 20th Floor New York, New York 10022 (212) 512-1000 (212) 512-1001 (212) 512-1002		Architects 225 Riverside Drive, 20th Floor New York, New York 10022 (212) 512-1000 (212) 512-1001 (212) 512-1002		Engineers 225 Riverside Drive, 20th Floor New York, New York 10022 (212) 512-1000 (212) 512-1001 (212) 512-1002	
DATE	12/11/97	DRAWN BY	V. Hoffman	CHECKED BY	R. Walker
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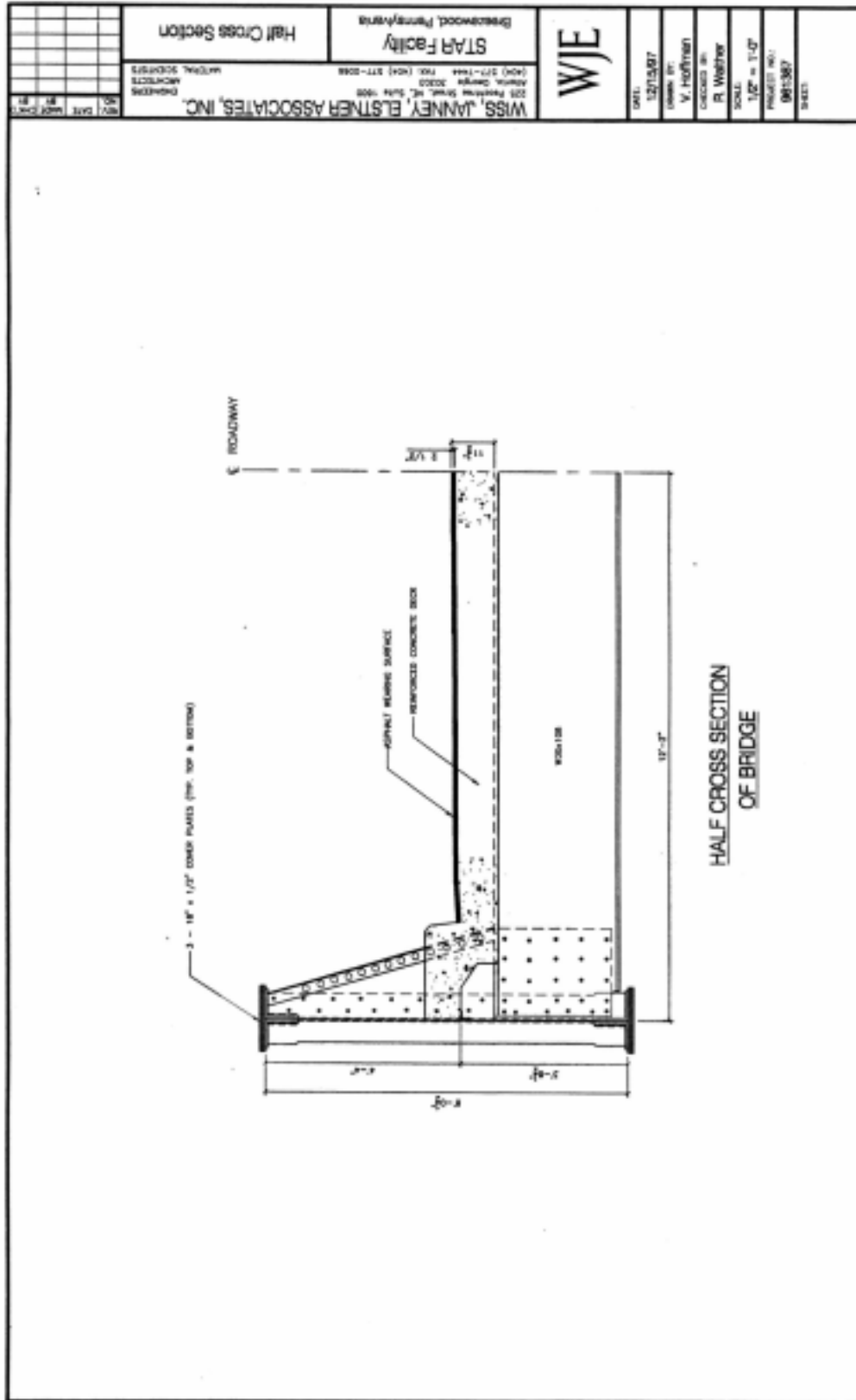


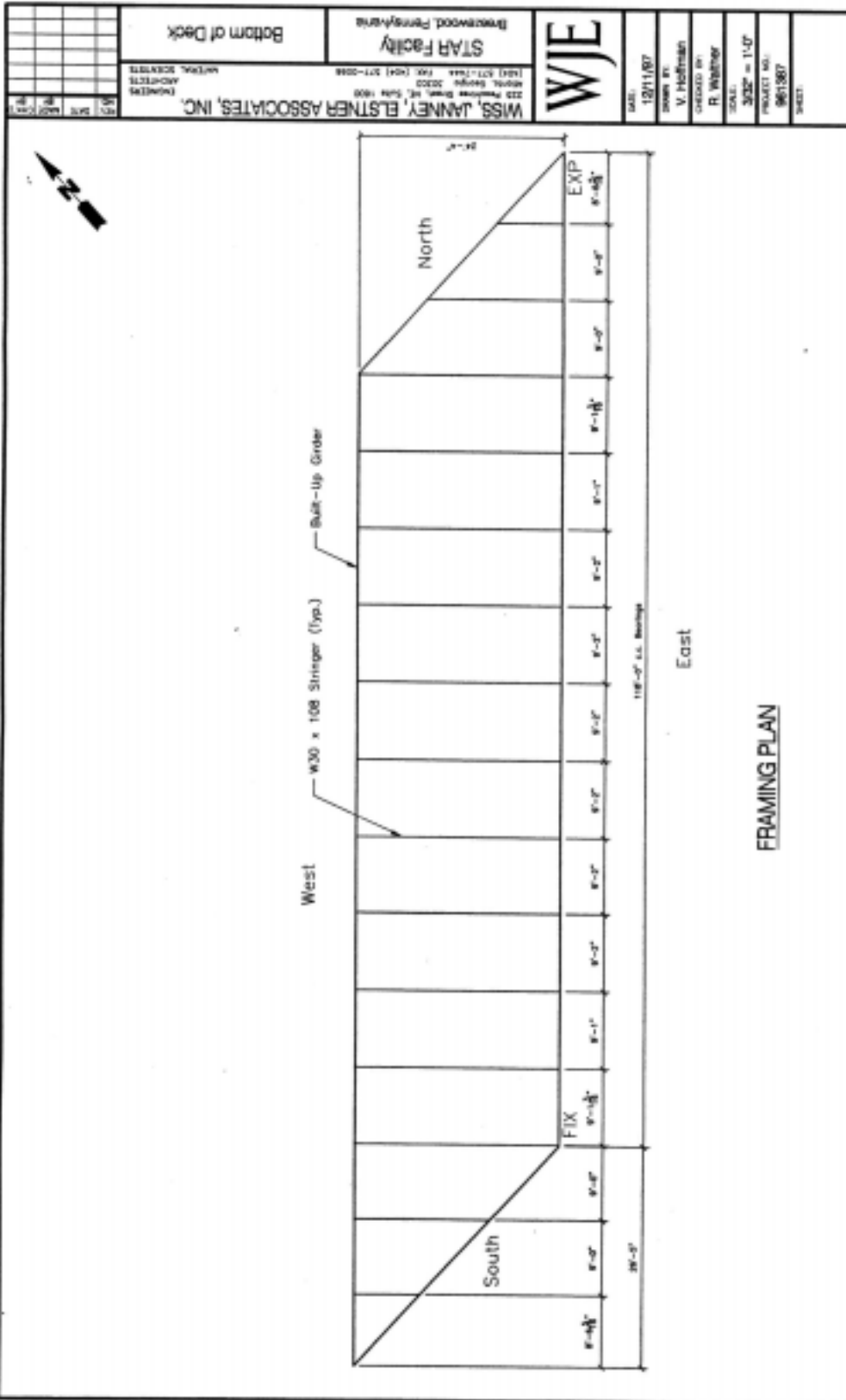


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 04/01/98 14:54:00









Task B

Task B

Task B

Task B

Task B

Task B

Task B

Task B

TASK B
Bridge B101A

Comments: _____

[illegible]

Inspector ID:

Date:

TASK B
Bridge B101A

OVERALL SUPERSTRUCTURE CONDITION RATING: N 9 8 7 6 5 4 3 2 1 0

Comments: _____

<u>Superstructure Elements</u>	<u>Rating</u>											<u>Remarks</u>
Stringers	N	9	8	7	6	5	4	3	2	1	0	_____
Floorbeams	N	9	8	7	6	5	4	3	2	1	0	_____
Floor System Bracing	N	9	8	7	6	5	4	3	2	1	0	_____
Multibeams	N	9	8	7	6	5	4	3	2	1	0	_____
Girders	N	9	8	7	6	5	4	3	2	1	0	_____
Arches	N	9	8	7	6	5	4	3	2	1	0	_____
Cables	N	9	8	7	6	5	4	3	2	1	0	_____
Paint	N	9	8	7	6	5	4	3	2	1	0	_____
Bearing Devices	N	9	8	7	6	5	4	3	2	1	0	_____
Connections	N	9	8	7	6	5	4	3	2	1	0	_____
Welds	N	9	8	7	6	5	4	3	2	1	0	_____
_____	N	9	8	7	6	5	4	3	2	1	0	_____
_____	N	9	8	7	6	5	4	3	2	1	0	_____

Timber Decay _____
Concrete Deterioration _____
Steel Corrosion _____
Collision Damage _____
LL Deflection _____
Vibration _____
Member Alignment _____
Utilities _____

Notes: _____

Inspector ID:

Date:

TASK B
Bridge B101A

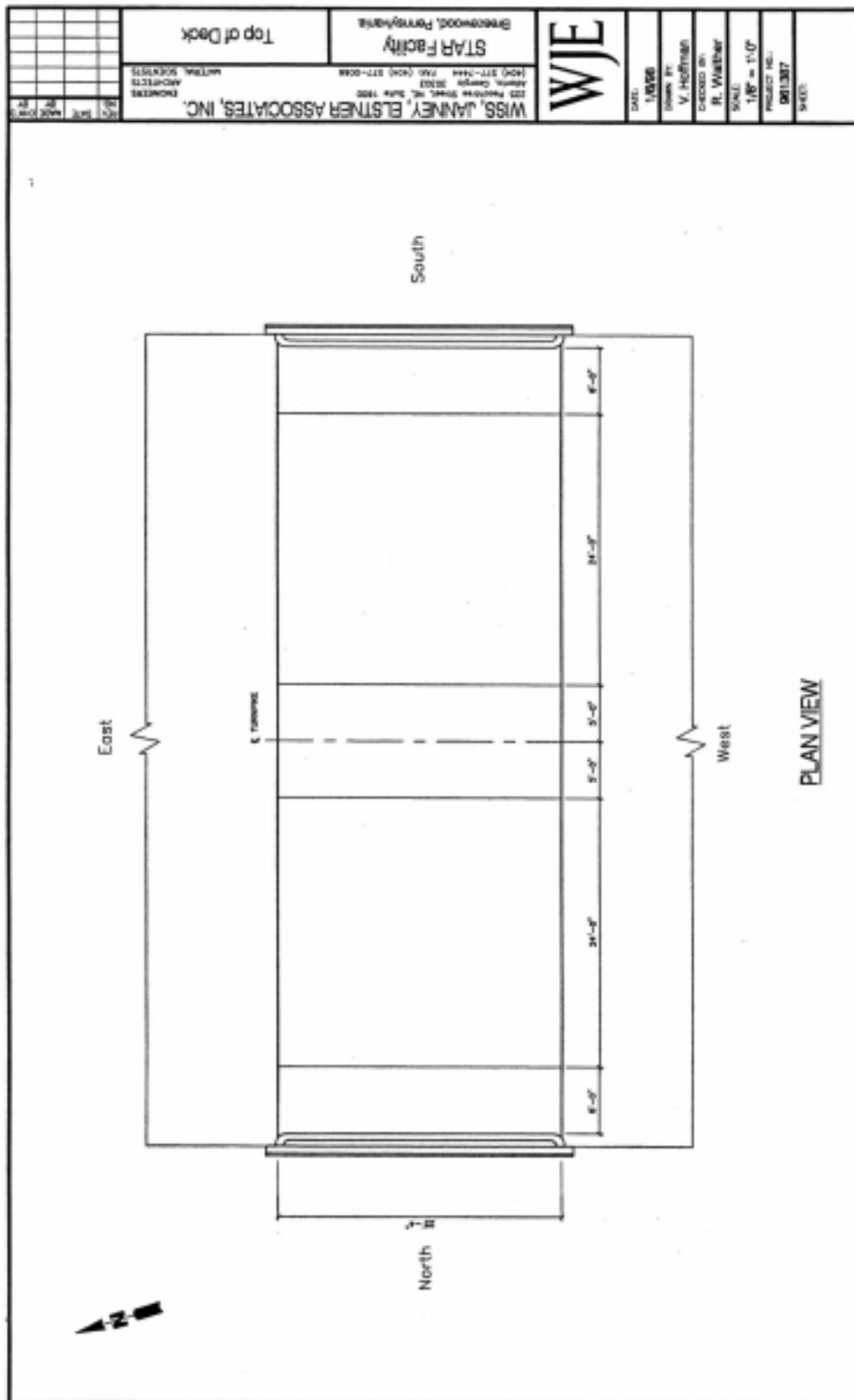
OVERALL SUBSTRUCTURE CONDITION RATING: N 9 8 7 6 5 4 3 2 1 0

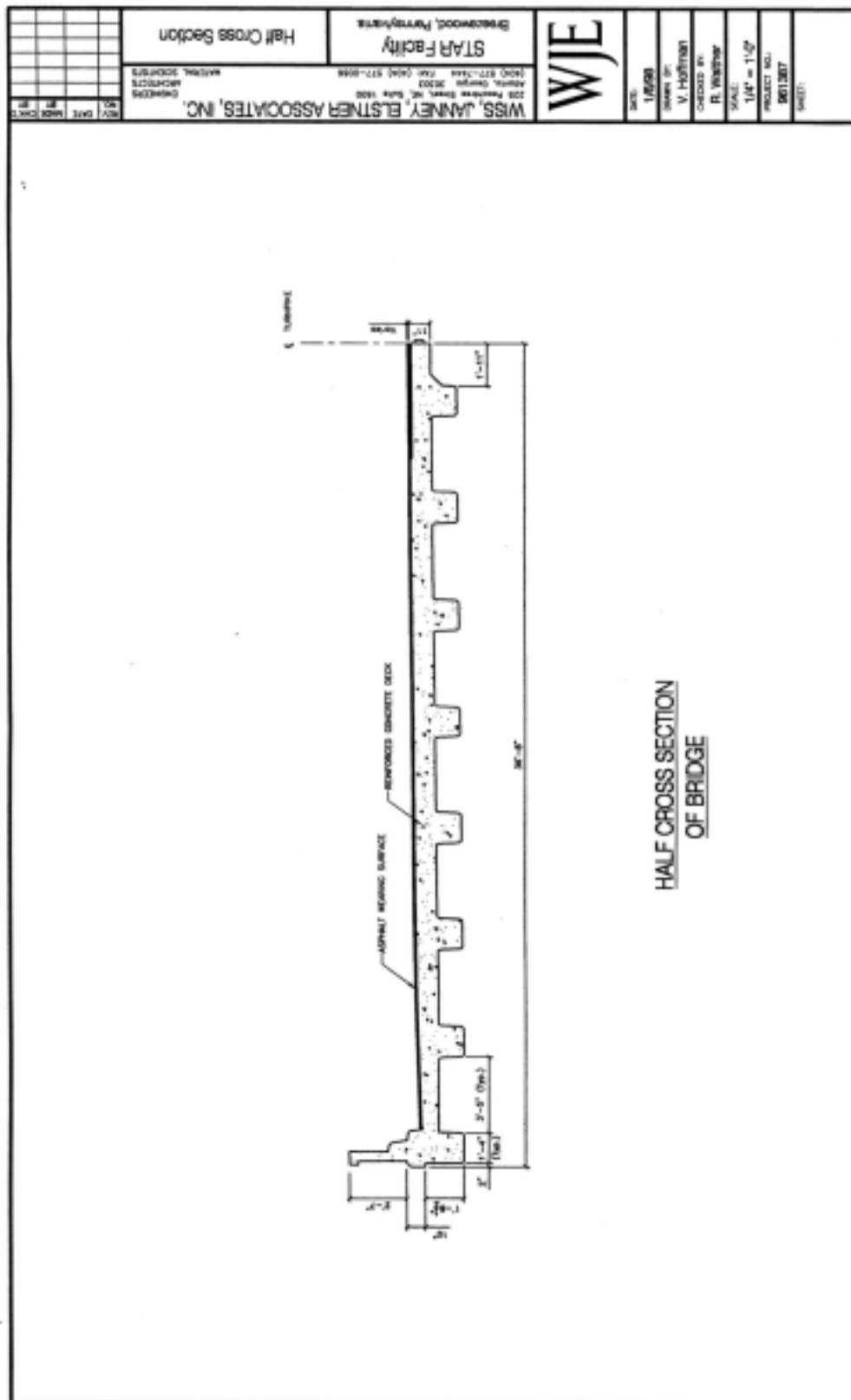
Comments: _____

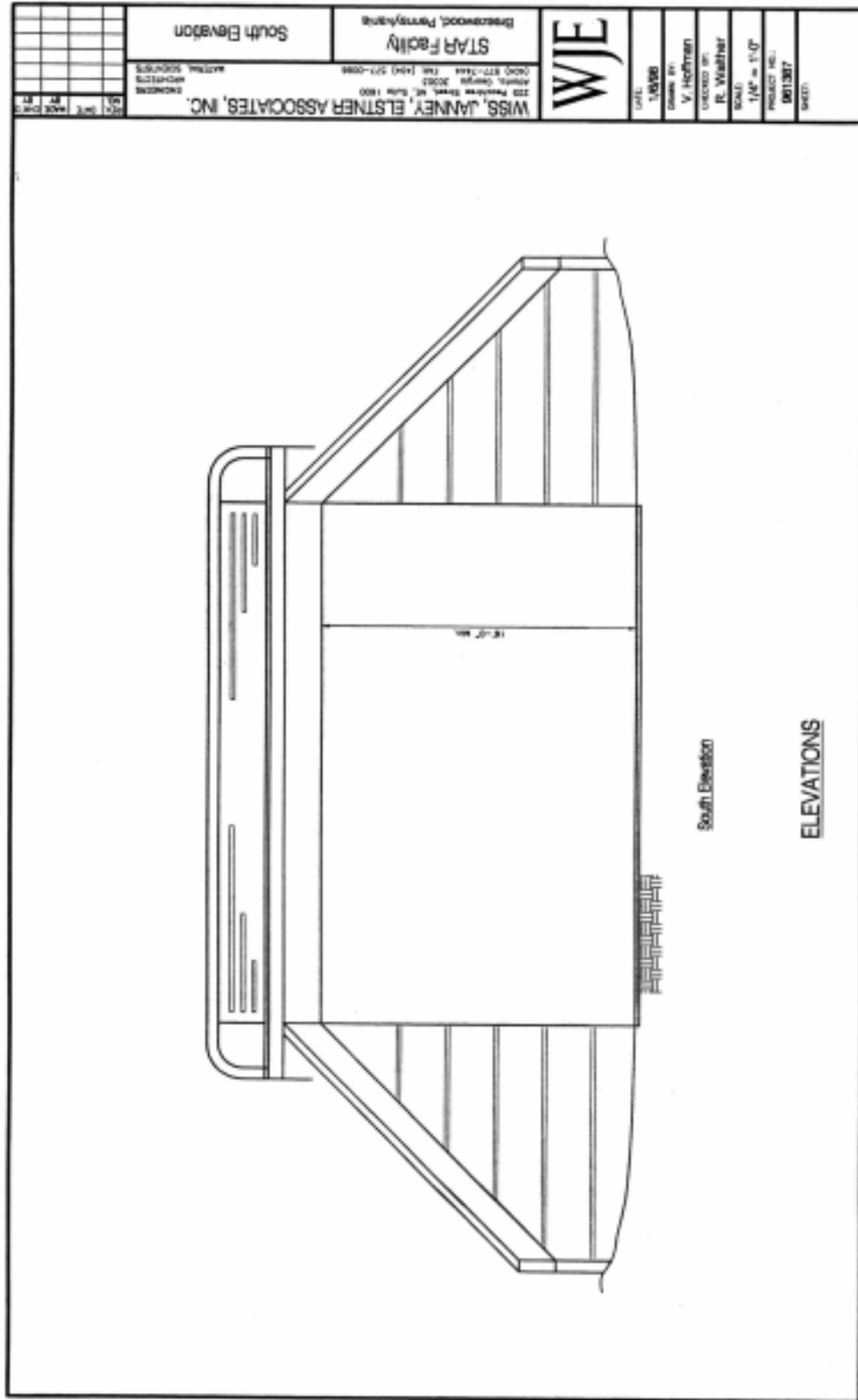
<u>Substructure Elements</u>				<u>Rating</u>								<u>Remarks</u>	
Abutments		N	9	8	7	6	5	4	3	2	1	0	
	Piles	N	9	8	7	6	5	4	3	2	1	0	
	Footing	N	9	8	7	6	5	4	3	2	1	0	
	Stem	N	9	8	7	6	5	4	3	2	1	0	
	Bearing Seat	N	9	8	7	6	5	4	3	2	1	0	
	Backwall	N	9	8	7	6	5	4	3	2	1	0	
	Wingwalls	N	9	8	7	6	5	4	3	2	1	0	
Piers and Bents		N	9	8	7	6	5	4	3	2	1	0	
	Piles	N	9	8	7	6	5	4	3	2	1	0	
	Footing	N	9	8	7	6	5	4	3	2	1	0	
	Columns/Stem	N	9	8	7	6	5	4	3	2	1	0	
	Cap	N	9	8	7	6	5	4	3	2	1	0	
		N	9	8	7	6	5	4	3	2	1	0	
		N	9	8	7	6	5	4	3	2	1	0	

Scour/Undermining _____
Settlement _____
Substructure Protection _____
Collision Damage _____
High-water Mark _____
Concrete Deterioration _____
Steel Corrosion _____
Paint _____

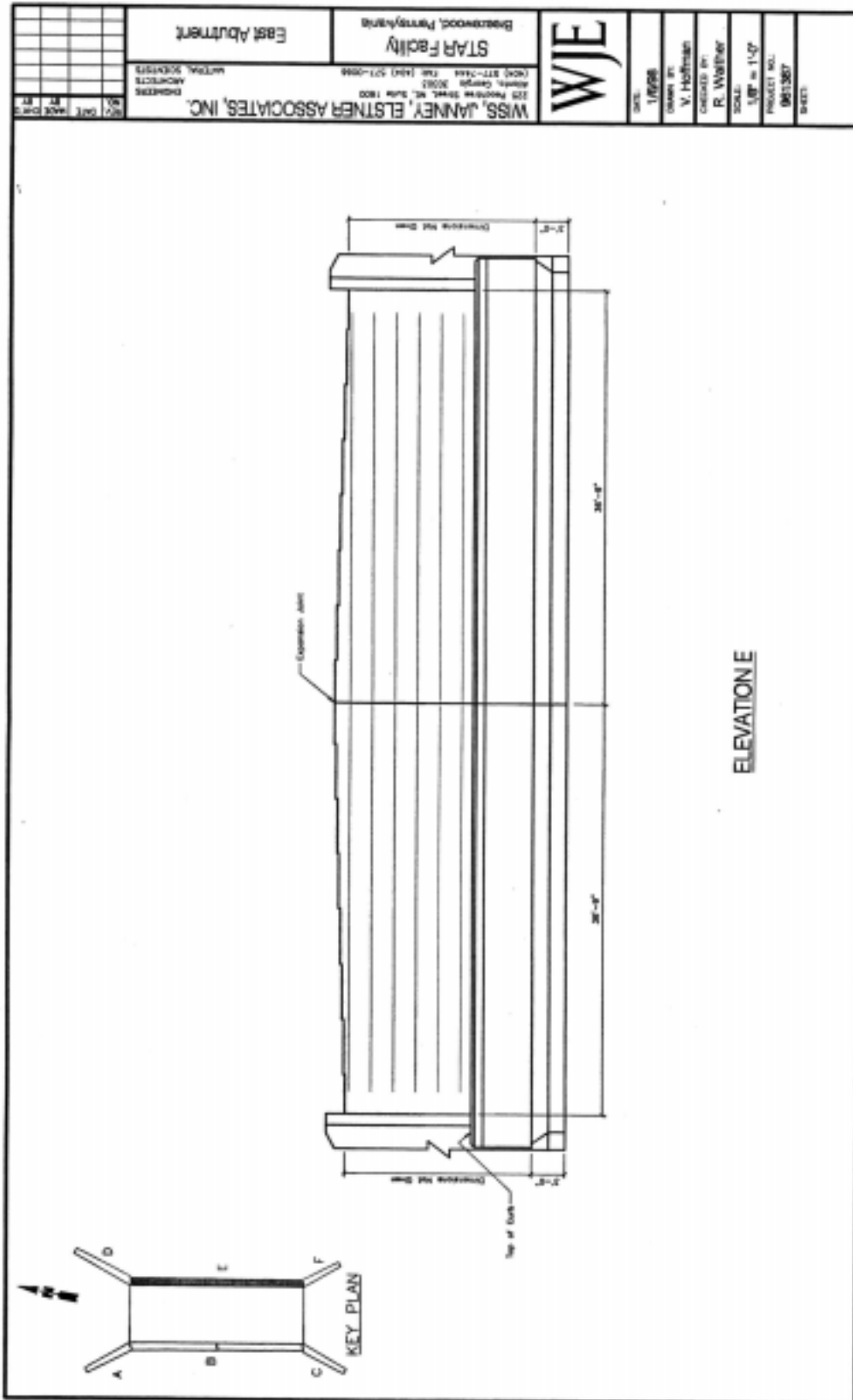
Notes: _____







DATE: 1/10/08		DRAWN BY: V. Hoffman		CHECKED BY: R. Wadner		SCALE: 1/4" = 1'-0"		PROJECT NO.: 061367		SHEET:	
WJE		WISS, JANNEY, ELSTNER ASSOCIATES, INC.		220 Pineview Drive, Suite 1000		Arlene, Georgia 30533		Tel: (404) 877-1344 Fax: (404) 571-0986		South Elevation	
STAR Facility		Broomwood, Pennsylvania		ENGINEERING		ARCHITECTS		SPECIAL SERVICES			
NO.		DATE		BY		BY		BY			



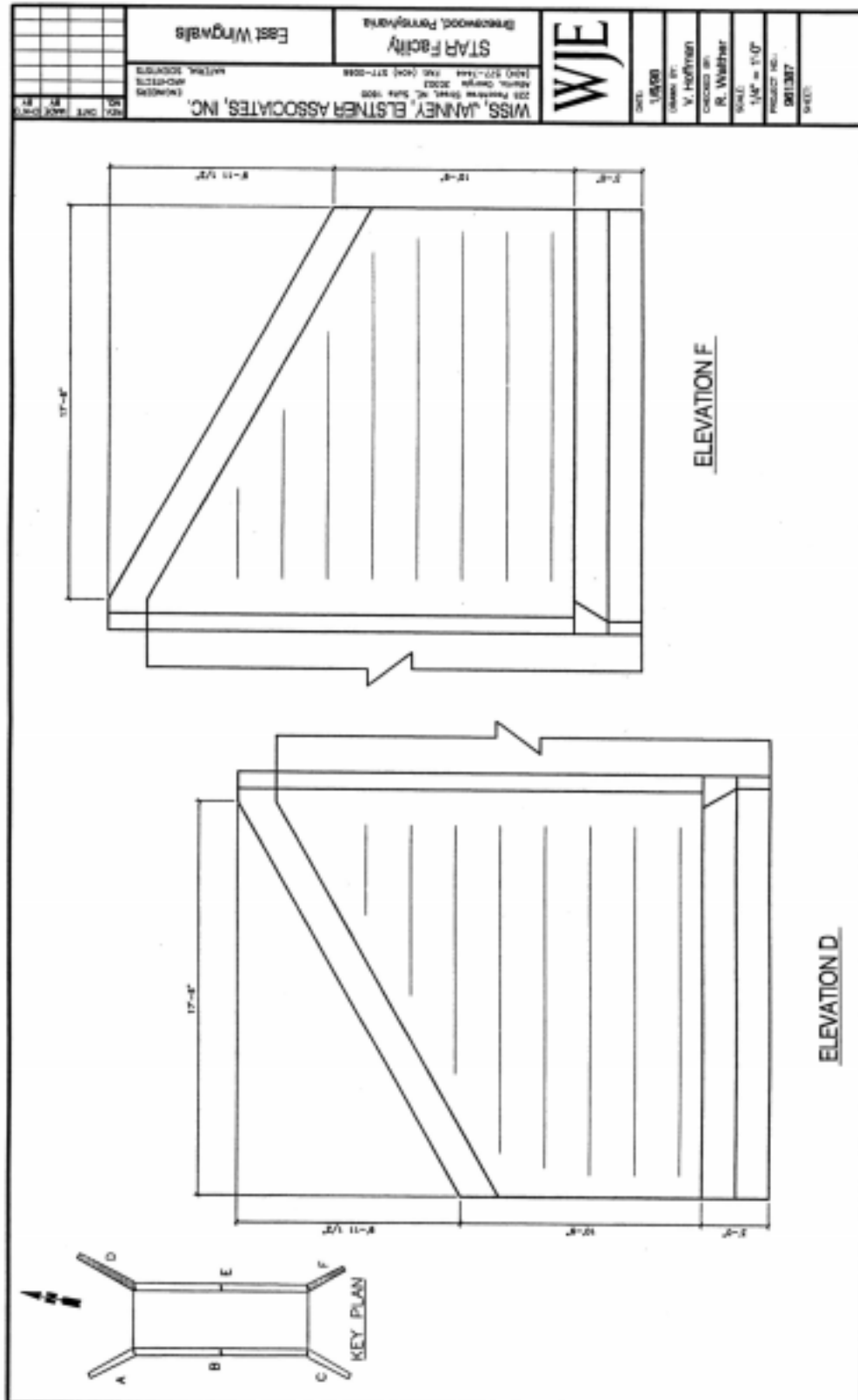
WJE

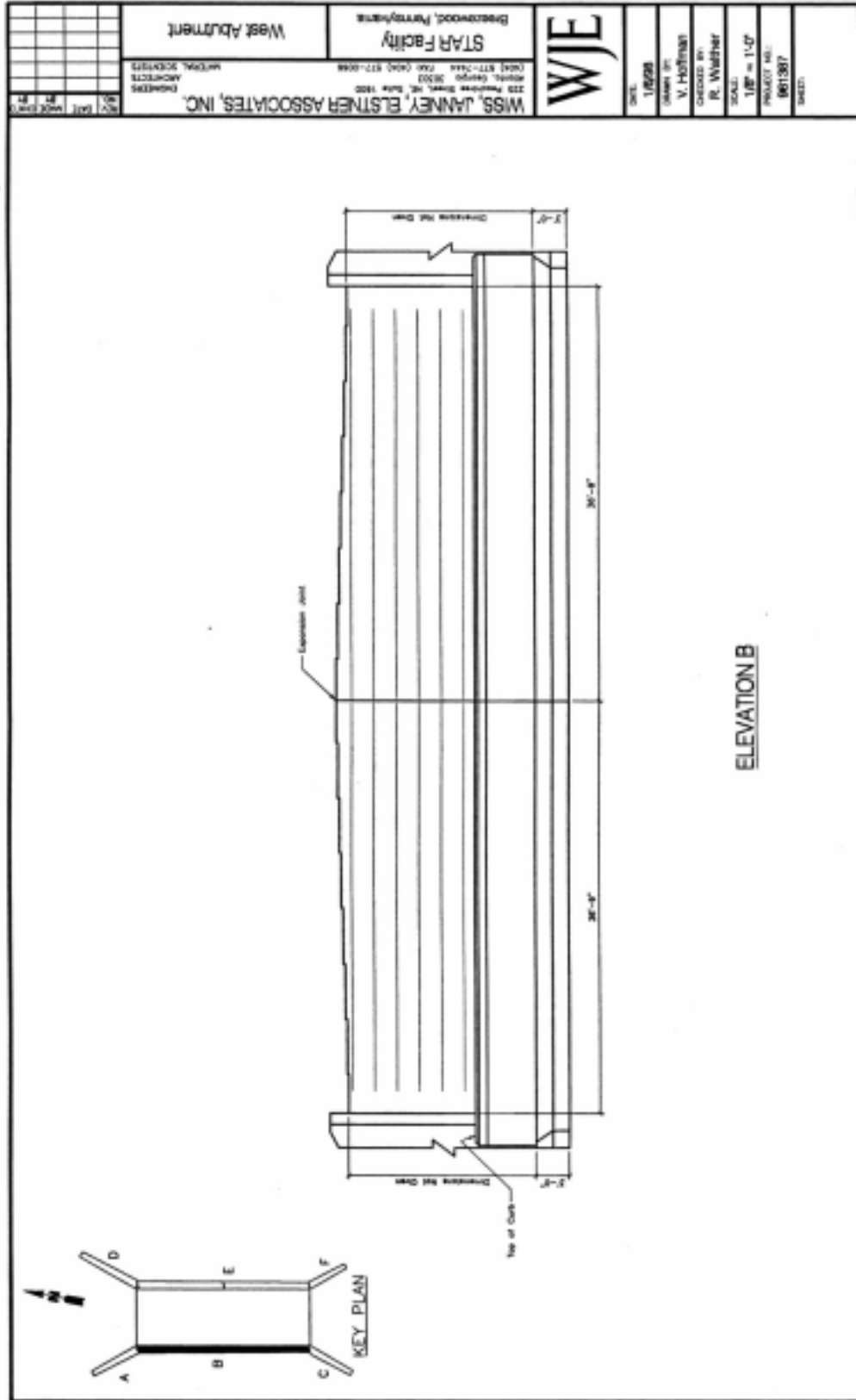
STAR Facility
Blastwood, Pennsylvania

East Abutment

WISS, JANNEY, ELSTNER ASSOCIATES, INC.
125 RICHMOND STREET, SUITE 1000
PHILADELPHIA, PA 19106
ARCHITECTS
PROJECT NO. 061387
SHEET NO. 061387

NO.	DATE	REVISION
1	1/1/00	1/1/00
2	1/1/00	1/1/00
3	1/1/00	1/1/00
4	1/1/00	1/1/00
5	1/1/00	1/1/00
6	1/1/00	1/1/00
7	1/1/00	1/1/00
8	1/1/00	1/1/00
9	1/1/00	1/1/00
10	1/1/00	1/1/00





Task C

Task C

Task C

Task C

Task C

Task C

Task C

Task C

TASK C
Bridge B111A

Comments: _____

[illegible]

Inspector ID:

Date:

TASK C
Bridge B111A

OVERALL SUPERSTRUCTURE CONDITION RATING: N 9 8 7 6 5 4 3 2 1 0

Comments: _____

<u>Superstructure Elements</u>	<u>Rating</u>											<u>Remarks</u>
Stringers	N	9	8	7	6	5	4	3	2	1	0	_____
Floorbeams	N	9	8	7	6	5	4	3	2	1	0	_____
Floor System Bracing	N	9	8	7	6	5	4	3	2	1	0	_____
Multibeams	N	9	8	7	6	5	4	3	2	1	0	_____
Girders	N	9	8	7	6	5	4	3	2	1	0	_____
Arches	N	9	8	7	6	5	4	3	2	1	0	_____
Cables	N	9	8	7	6	5	4	3	2	1	0	_____
Paint	N	9	8	7	6	5	4	3	2	1	0	_____
Bearing Devices	N	9	8	7	6	5	4	3	2	1	0	_____
Connections	N	9	8	7	6	5	4	3	2	1	0	_____
Welds	N	9	8	7	6	5	4	3	2	1	0	_____
_____	N	9	8	7	6	5	4	3	2	1	0	_____
_____	N	9	8	7	6	5	4	3	2	1	0	_____

Timber Decay _____
Concrete Deterioration _____
Steel Corrosion _____
Collision Damage _____
LL Deflection _____
Vibration _____
Member Alignment _____
Utilities _____

Notes: _____

Inspector ID:

Date:

TASK C
Bridge B111A

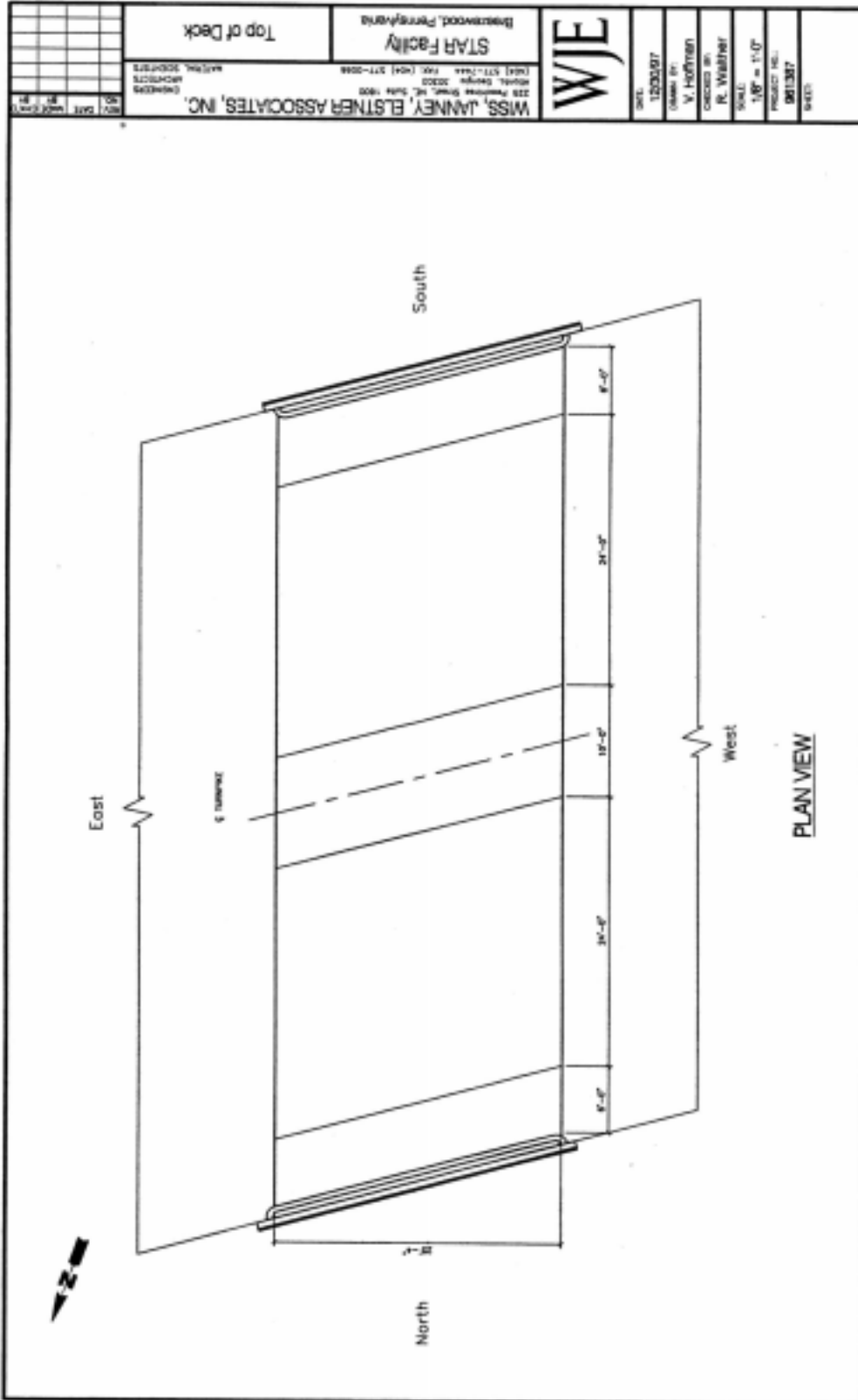
OVERALL SUBSTRUCTURE CONDITION RATING: N 9 8 7 6 5 4 3 2 1 0

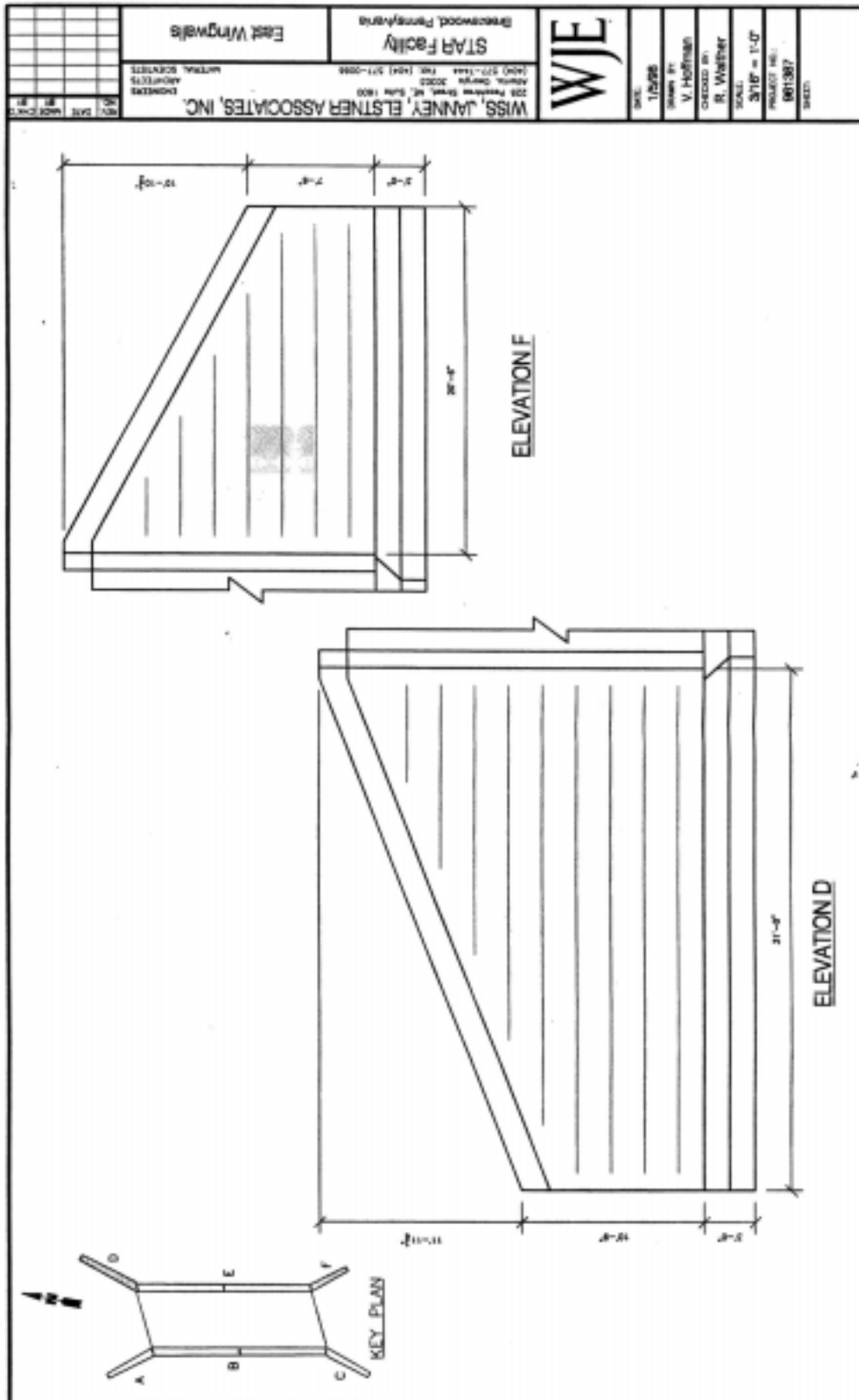
Comments: _____

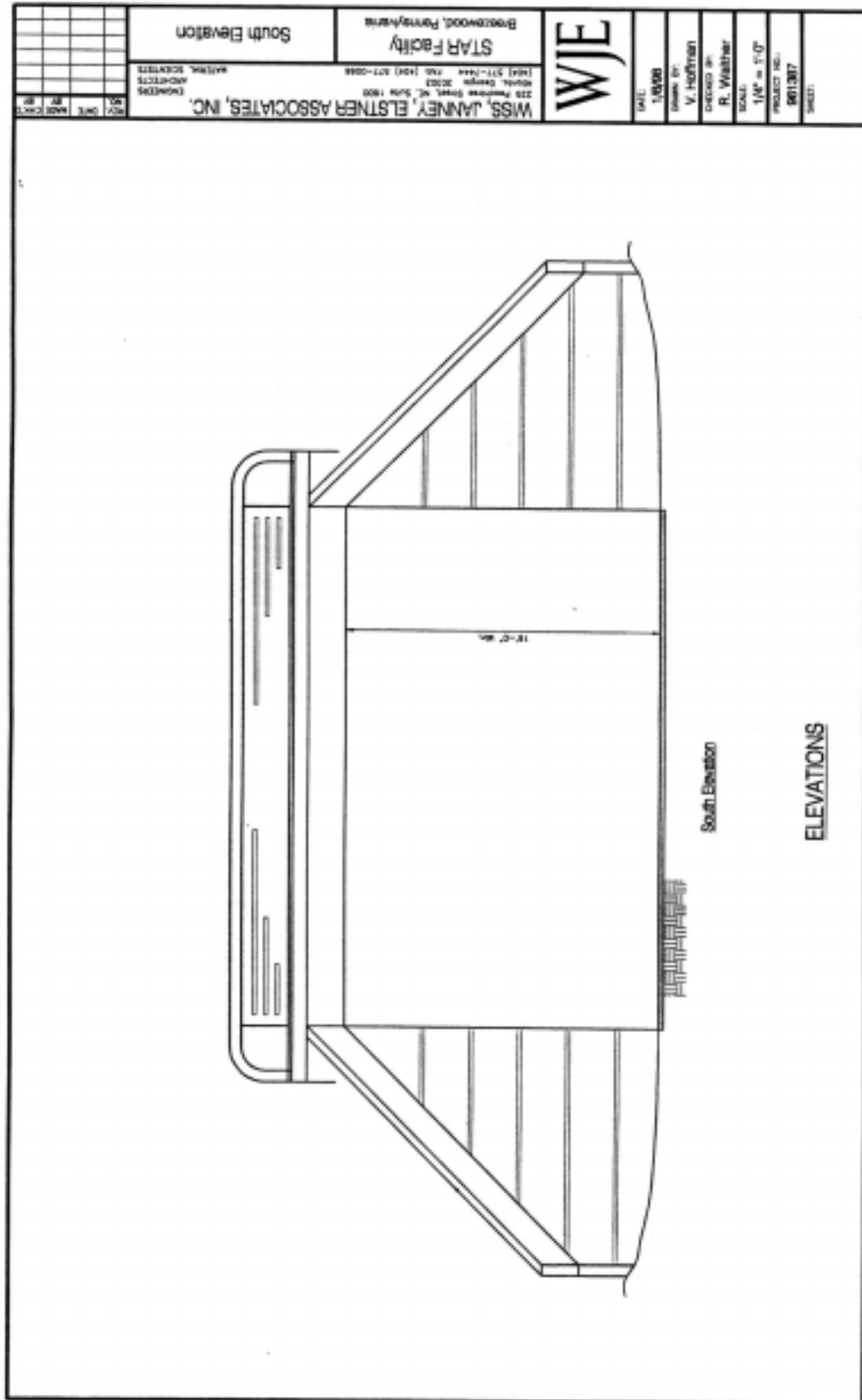
<u>Substructure Elements</u>				<u>Rating</u>								<u>Remarks</u>	
Abutments		N	9	8	7	6	5	4	3	2	1	0	
	Piles	N	9	8	7	6	5	4	3	2	1	0	
	Footing	N	9	8	7	6	5	4	3	2	1	0	
	Stem	N	9	8	7	6	5	4	3	2	1	0	
	Bearing Seat	N	9	8	7	6	5	4	3	2	1	0	
	Backwall	N	9	8	7	6	5	4	3	2	1	0	
	Wingwalls	N	9	8	7	6	5	4	3	2	1	0	
Piers and Bents		N	9	8	7	6	5	4	3	2	1	0	
	Piles	N	9	8	7	6	5	4	3	2	1	0	
	Footing	N	9	8	7	6	5	4	3	2	1	0	
	Columns/Stem	N	9	8	7	6	5	4	3	2	1	0	
	Cap	N	9	8	7	6	5	4	3	2	1	0	
		N	9	8	7	6	5	4	3	2	1	0	
		N	9	8	7	6	5	4	3	2	1	0	

Scour/Undermining _____
Settlement _____
Substructure Protection _____
Collision Damage _____
High-water Mark _____
Concrete Deterioration _____
Steel Corrosion _____
Paint _____

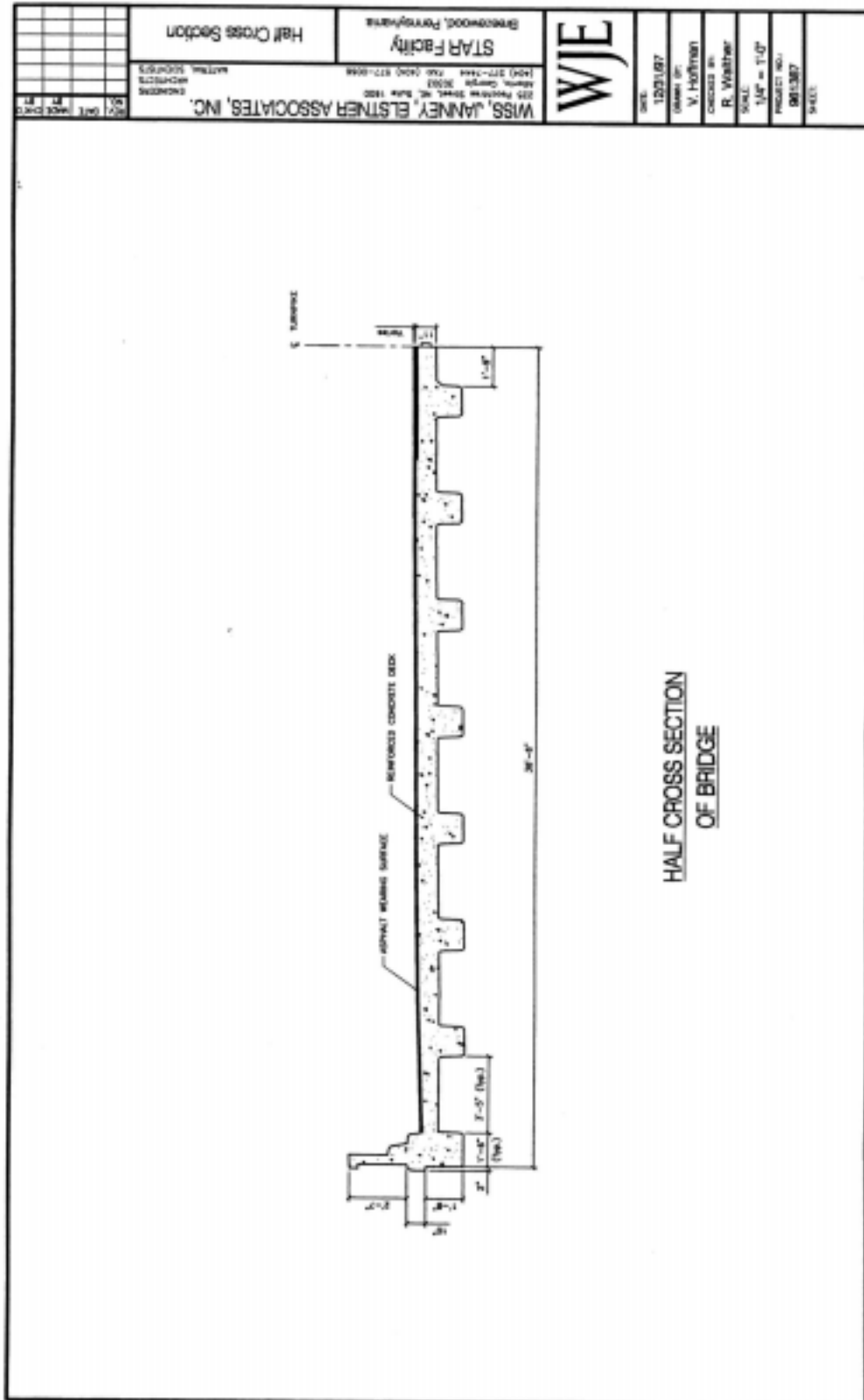
Notes: _____







SHEET		PROJECT NO.		DATE					
001.007		001.007		001.007					
SCALE		1/4" = 1'-0"		1/4" = 1'-0"					
CHECKED BY		R. Walther		R. Walther					
DESIGNED BY		V. Hoffman		V. Hoffman					
DATE		1/15/08		1/15/08					
WJE									
STAR Facility									
Brookwood, Pennsylvania									
MISS. JANNY, ELSTNER ASSOCIATES, INC.									
210 Riverside Street, N.E., Suite 1000									
Atlanta, Georgia 30303									
(404) 577-1444									
(404) 577-0555									
ARCHITECTS									
MATERIALS									
South Elevation									
REV.						DATE		BY	
01						01/15/08		CHW	
02						01/15/08		CHW	
03		01/15/08		CHW					



P:\881387\881387.dwg
 SHEET SCALE: 1/4" = 1'-0"

Task D

Task D

Task D

Task D

Task D

Task D

Task D

Task D

TASK D

Bridge B543

Comments: _____

[illegible]

Inspector ID:

Date:

TASK D
Bridge B543

OVERALL SUPERSTRUCTURE CONDITION RATING: N 9 8 7 6 5 4 3 2 1 0

Comments: _____

<u>Superstructure Elements</u>	<u>Rating</u>											<u>Remarks</u>
Stringers	N	9	8	7	6	5	4	3	2	1	0	
Floorbeams	N	9	8	7	6	5	4	3	2	1	0	
Floor System Bracing	N	9	8	7	6	5	4	3	2	1	0	
Multibeams	N	9	8	7	6	5	4	3	2	1	0	
Girders	N	9	8	7	6	5	4	3	2	1	0	
Arches	N	9	8	7	6	5	4	3	2	1	0	
Cables	N	9	8	7	6	5	4	3	2	1	0	
Paint	N	9	8	7	6	5	4	3	2	1	0	
Bearing Devices	N	9	8	7	6	5	4	3	2	1	0	
Connections	N	9	8	7	6	5	4	3	2	1	0	
Welds	N	9	8	7	6	5	4	3	2	1	0	
	N	9	8	7	6	5	4	3	2	1	0	
	N	9	8	7	6	5	4	3	2	1	0	

Timber Decay	_____
Concrete Deterioration	_____
Steel Corrosion	_____
Collision Damage	_____
LL Deflection	_____
Vibration	_____
Member Alignment	_____
Utilities	_____

Notes: _____

Inspector ID:

Date:

TASK D
Bridge B543

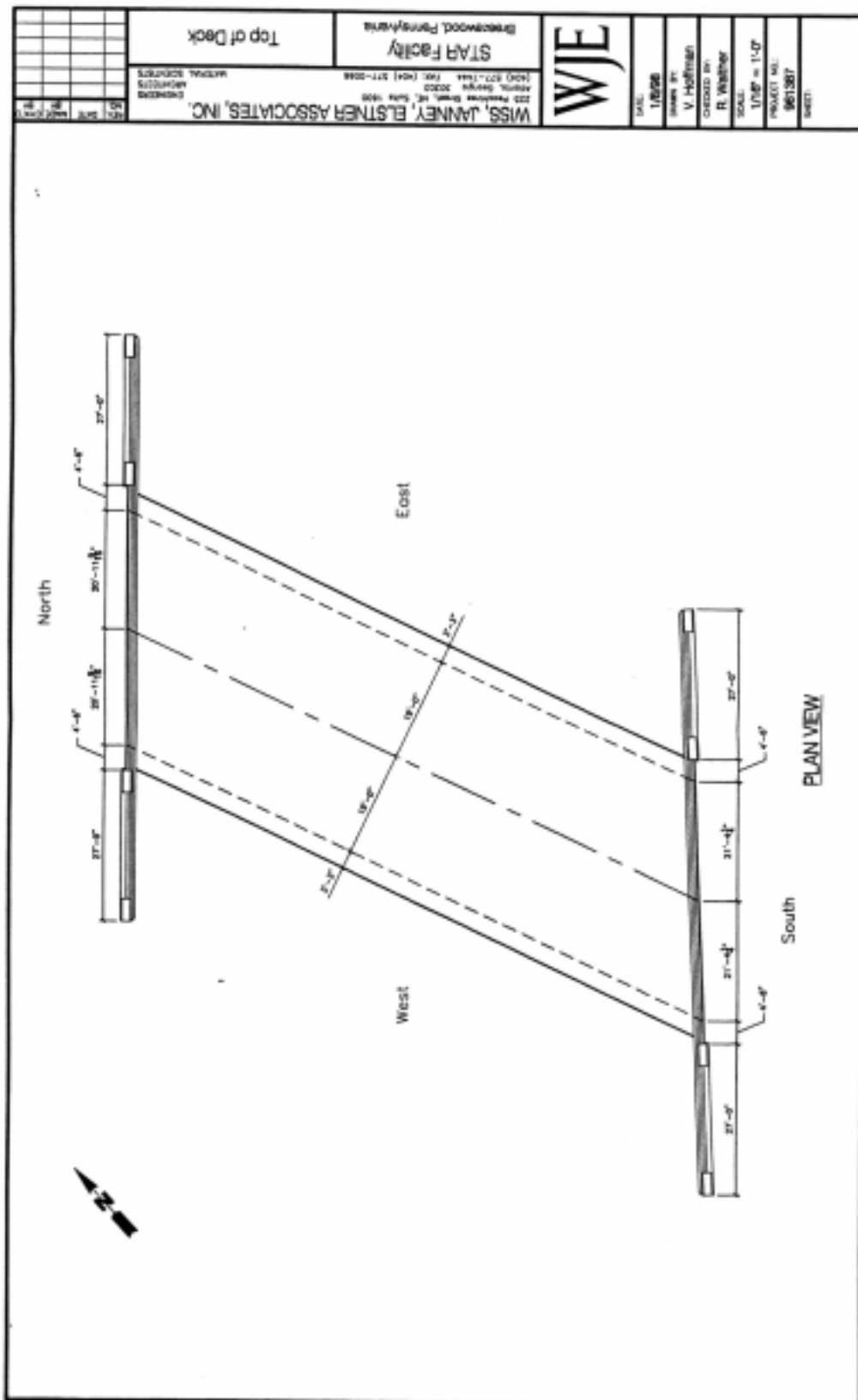
OVERALL SUBSTRUCTURE CONDITION RATING: N 9 8 7 6 5 4 3 2 1 0

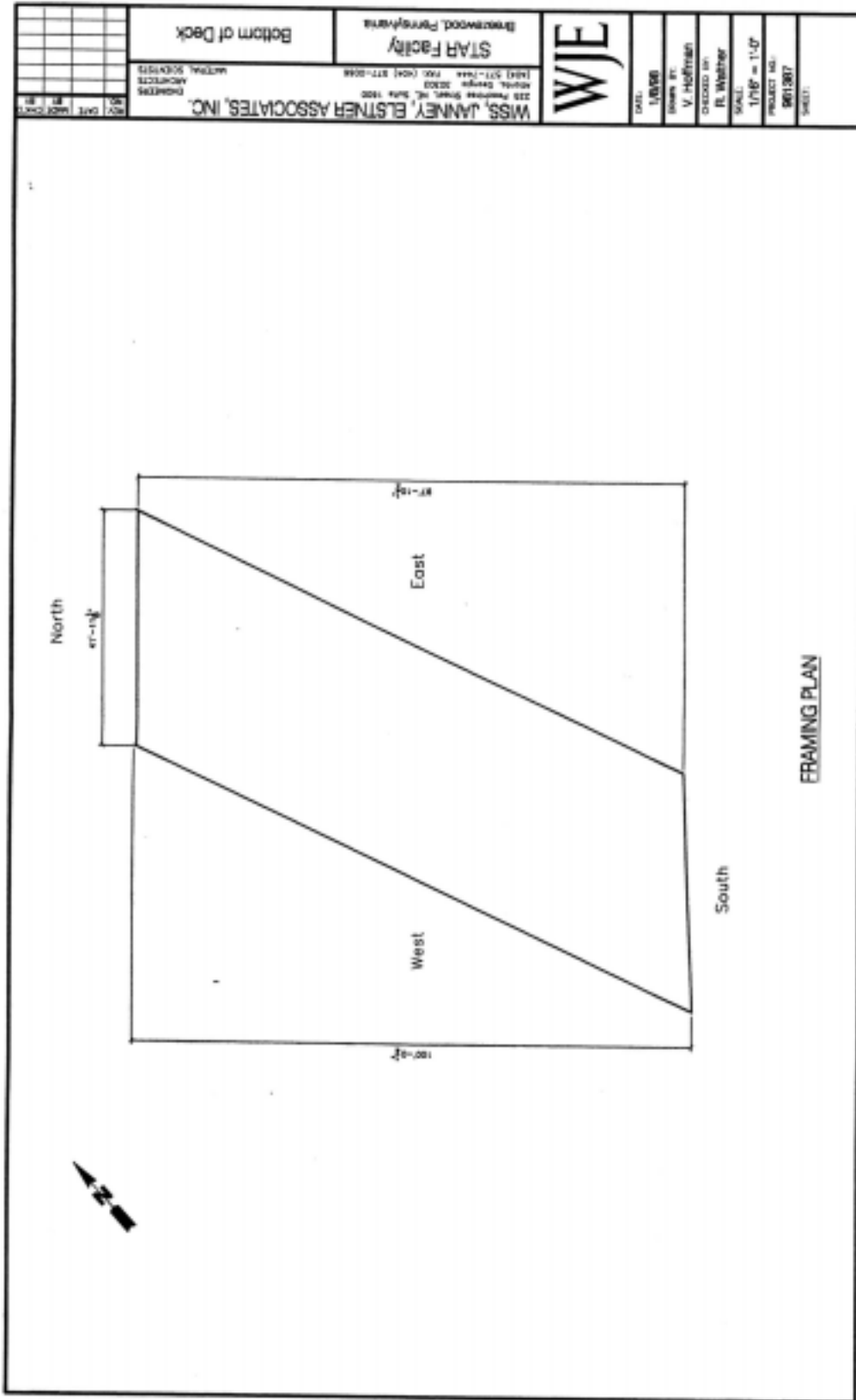
Comments: _____

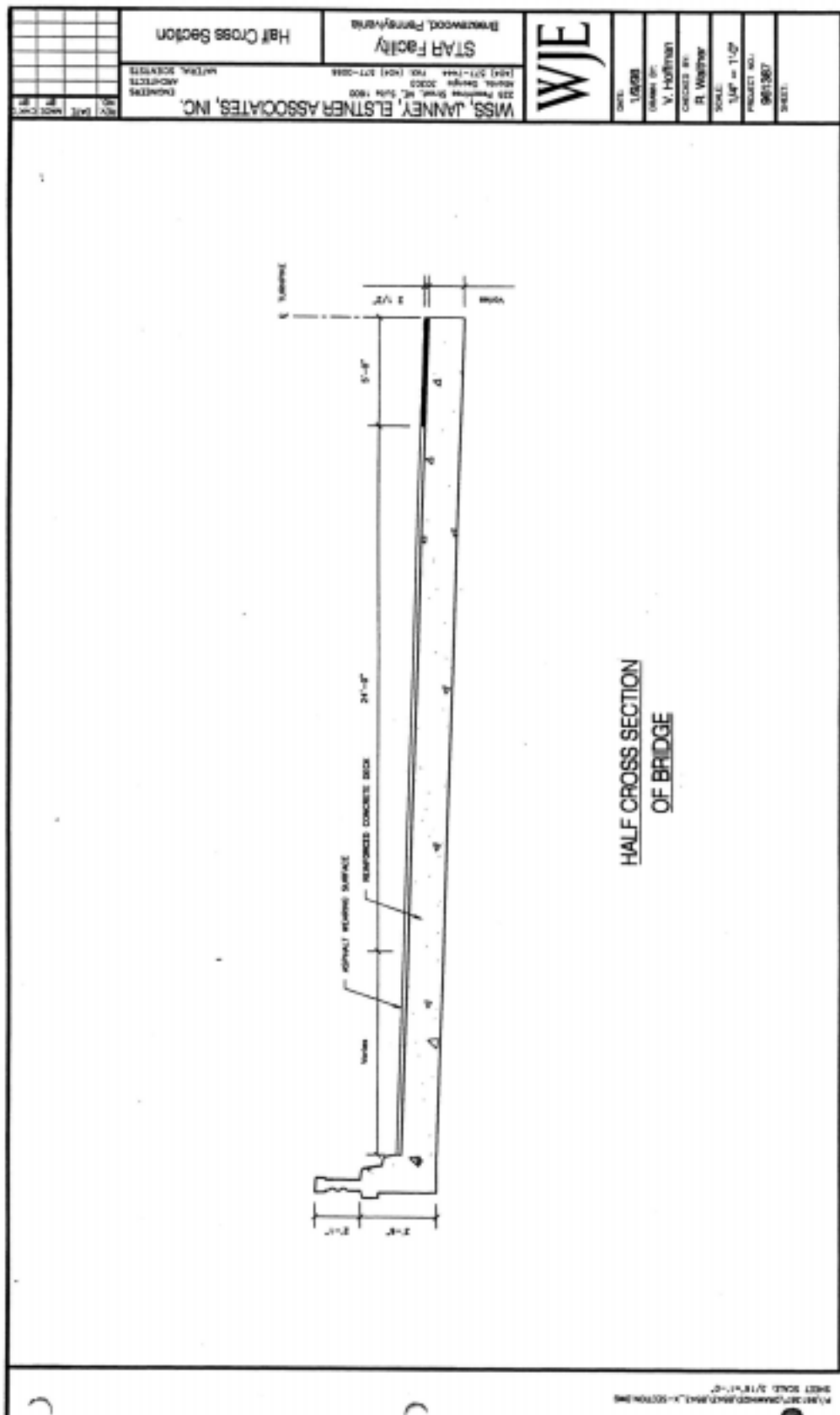
<u>Substructure Elements</u>				<u>Rating</u>								<u>Remarks</u>	
Abutments		N	9	8	7	6	5	4	3	2	1	0	
	Piles	N	9	8	7	6	5	4	3	2	1	0	
	Footing	N	9	8	7	6	5	4	3	2	1	0	
	Stem	N	9	8	7	6	5	4	3	2	1	0	
	Bearing Seat	N	9	8	7	6	5	4	3	2	1	0	
	Backwall	N	9	8	7	6	5	4	3	2	1	0	
	Wingwalls	N	9	8	7	6	5	4	3	2	1	0	
Piers and Bents		N	9	8	7	6	5	4	3	2	1	0	
	Piles	N	9	8	7	6	5	4	3	2	1	0	
	Footing	N	9	8	7	6	5	4	3	2	1	0	
	Columns/Stem	N	9	8	7	6	5	4	3	2	1	0	
	Cap	N	9	8	7	6	5	4	3	2	1	0	
		N	9	8	7	6	5	4	3	2	1	0	
		N	9	8	7	6	5	4	3	2	1	0	

Scour/Undermining _____
Settlement _____
Substructure Protection _____
Collision Damage _____
High-water Mark _____
Concrete Deterioration _____
Steel Corrosion _____
Paint _____

Notes: _____







HALF CROSS SECTION
OF BRIDGE

WJE

STAR Facility
Broomfield, Pennsylvania

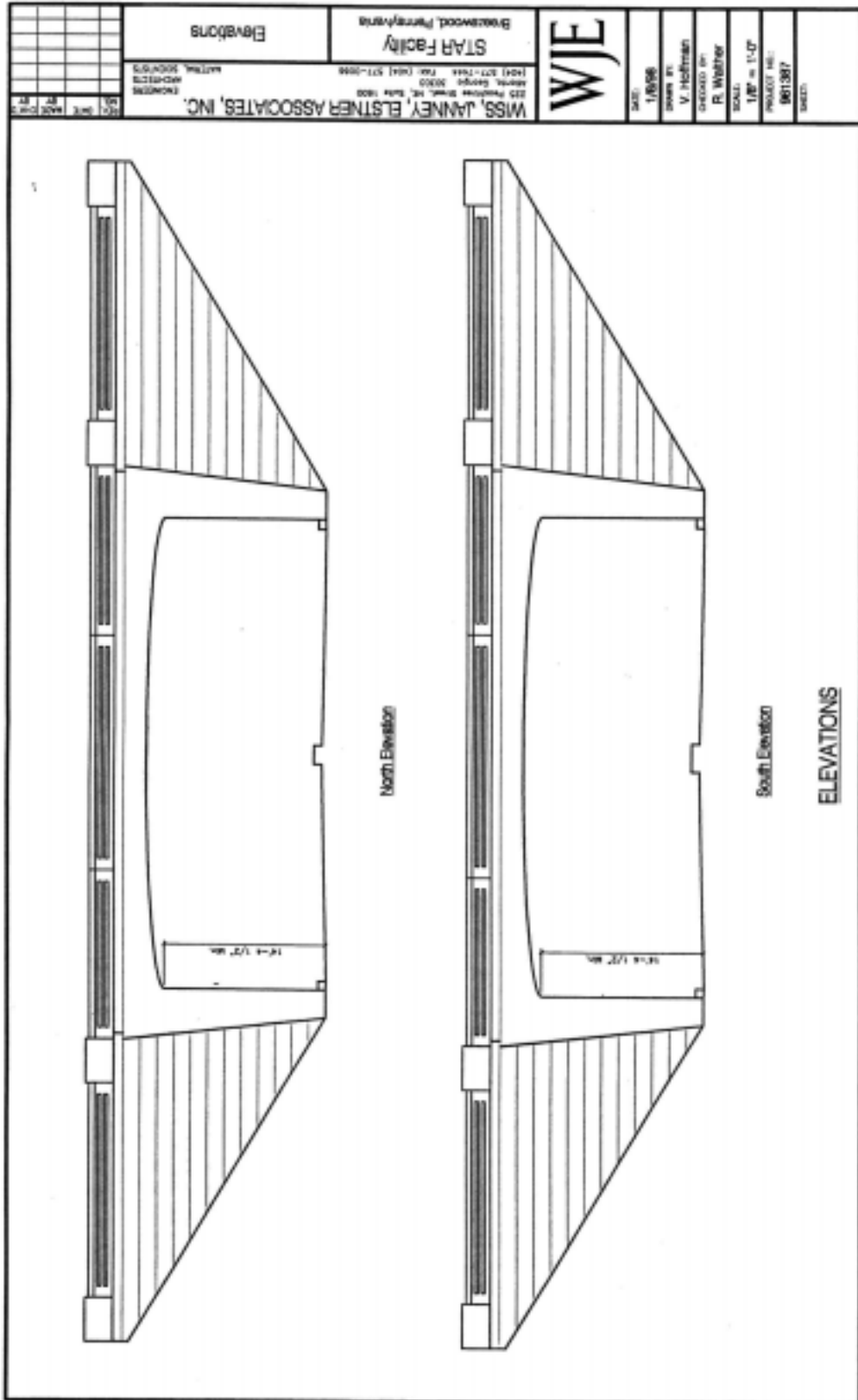
Half Cross Section

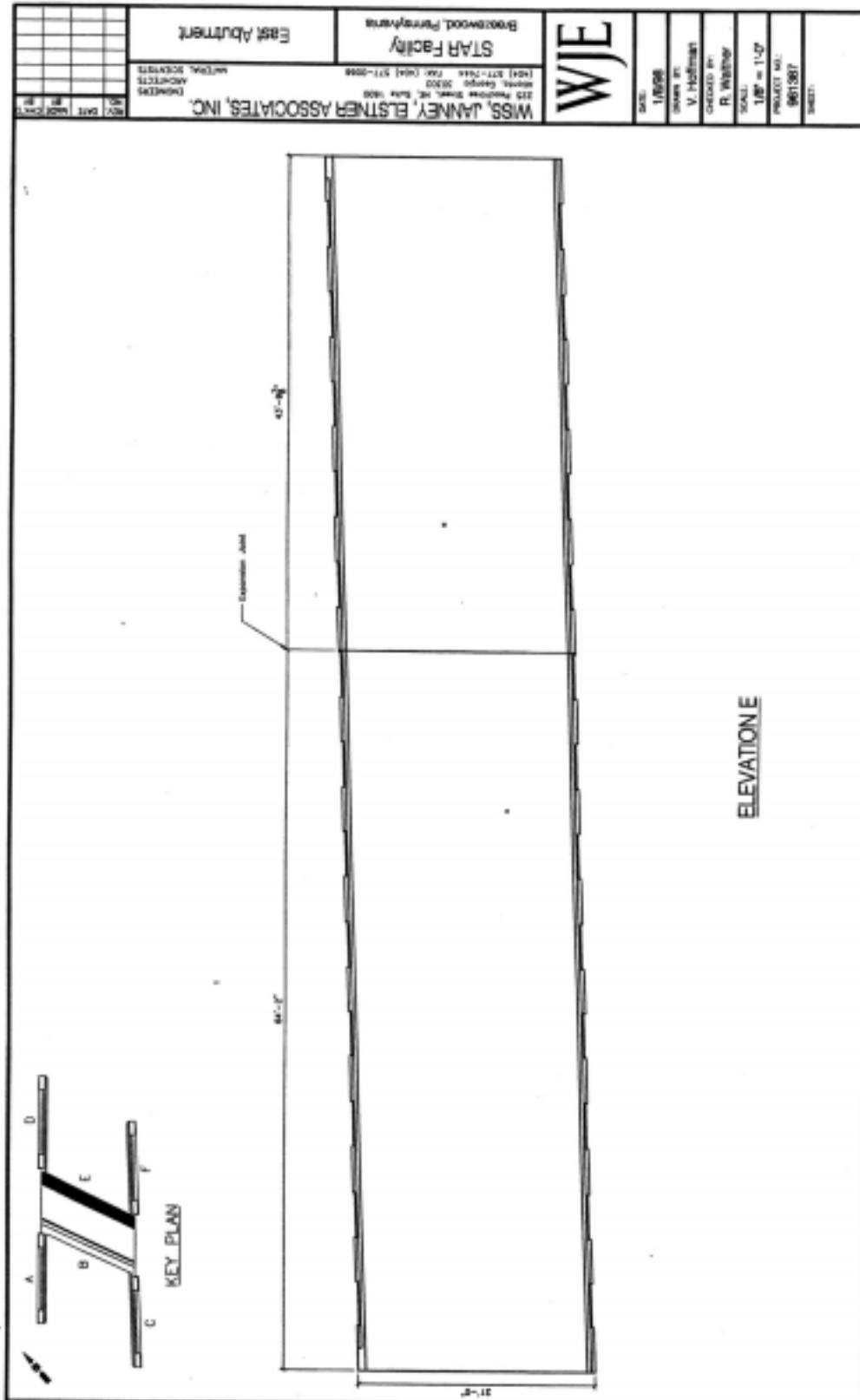
NO.	DATE	REVISION
1	10/1/00	1

DATE	10/1/00
DRAWN BY	V. Hoffman
CHECKED BY	R. Wether
SCALE	1/4" = 1'-0"
PROJECT NO.	961367
SHEET	

WISS, JANNEY, ELSTNER ASSOCIATES, INC.
225 Franklin Street, 10th Floor, New York, NY 10038
(212) 512-1000 FAX (212) 512-1001
ARCHITECTS
STRUCTURAL ENGINEERS
CIVIL ENGINEERS

1/4" = 1'-0" SCALE
SHEET 2 OF 2





PRINTED ON 100% RECYCLED PAPER
SHEET SCALE: 1/8"=1'-0"

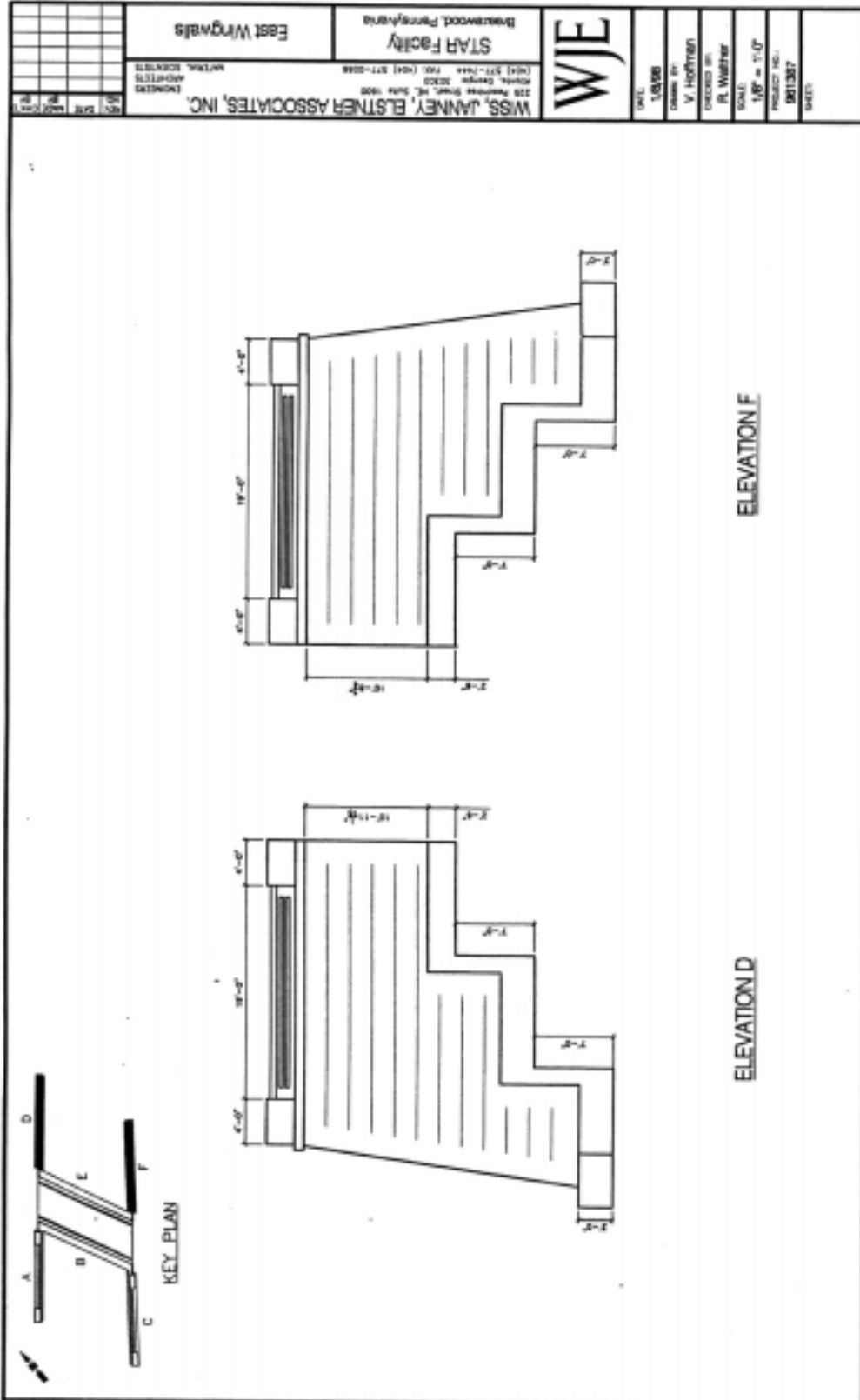
WJE

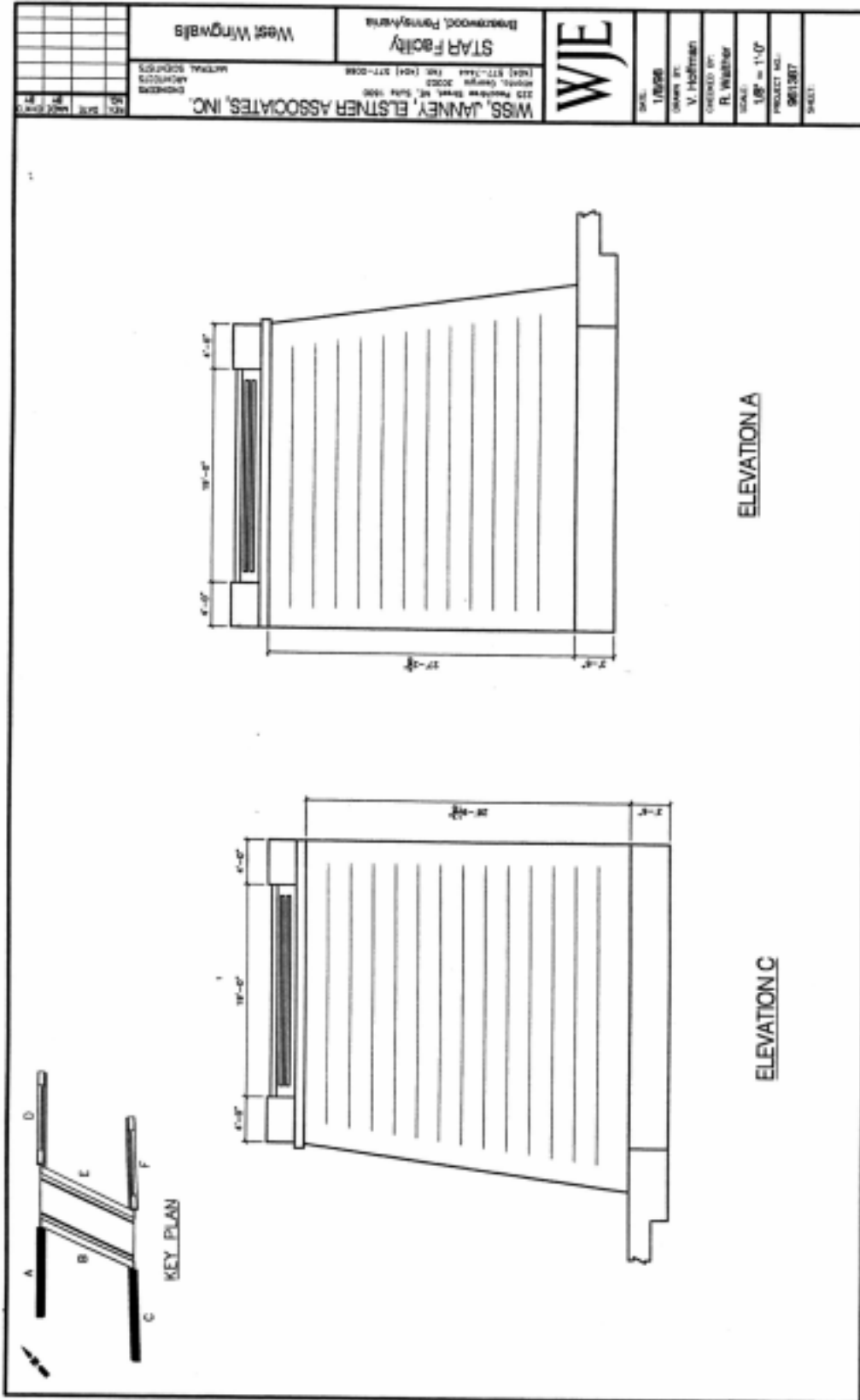
DATE: 1/26/98
DRAWN BY: V. J. Hoffman
CHECKED BY: R. W. W. W.
SCALE: 1/8" = 1'-0"
PROJECT NO.: 9601387
SHEET:

STAR Facility
BROOKWOOD, Pennsylvania
MISS, JANNNEY, ELSTNER ASSOCIATES, INC.
215 PINECREEK DRIVE, SUITE 100
PITTSBURGH, PENNSYLVANIA 15201
(412) 271-7544 FAX (412) 271-0555

East Abutment

NO.	DATE	REVISION
1	1/26/98	1





Task E

Task E

Task E

Task E

Task E

Task E

Task E

Task E

TASK E

Bridge B544

Comments: _____

[illegible]

Inspector ID:

Date:

TASK E
Bridge B544

OVERALL SUPERSTRUCTURE CONDITION RATING: N 9 8 7 6 5 4 3 2 1 0

Comments: _____

<u>Superstructure Elements</u>	<u>Rating</u>											<u>Remarks</u>
Stringers	N	9	8	7	6	5	4	3	2	1	0	_____
Floorbeams	N	9	8	7	6	5	4	3	2	1	0	_____
Floor System Bracing	N	9	8	7	6	5	4	3	2	1	0	_____
Multibeams	N	9	8	7	6	5	4	3	2	1	0	_____
Girders	N	9	8	7	6	5	4	3	2	1	0	_____
Arches	N	9	8	7	6	5	4	3	2	1	0	_____
Cables	N	9	8	7	6	5	4	3	2	1	0	_____
Paint	N	9	8	7	6	5	4	3	2	1	0	_____
Bearing Devices	N	9	8	7	6	5	4	3	2	1	0	_____
Connections	N	9	8	7	6	5	4	3	2	1	0	_____
Welds	N	9	8	7	6	5	4	3	2	1	0	_____
_____	N	9	8	7	6	5	4	3	2	1	0	_____
_____	N	9	8	7	6	5	4	3	2	1	0	_____

Timber Decay _____
Concrete Deterioration _____
Steel Corrosion _____
Collision Damage _____
LL Deflection _____
Vibration _____
Member Alignment _____
Utilities _____

Notes: _____

Inspector ID:

Date:

TASK E
Bridge B544

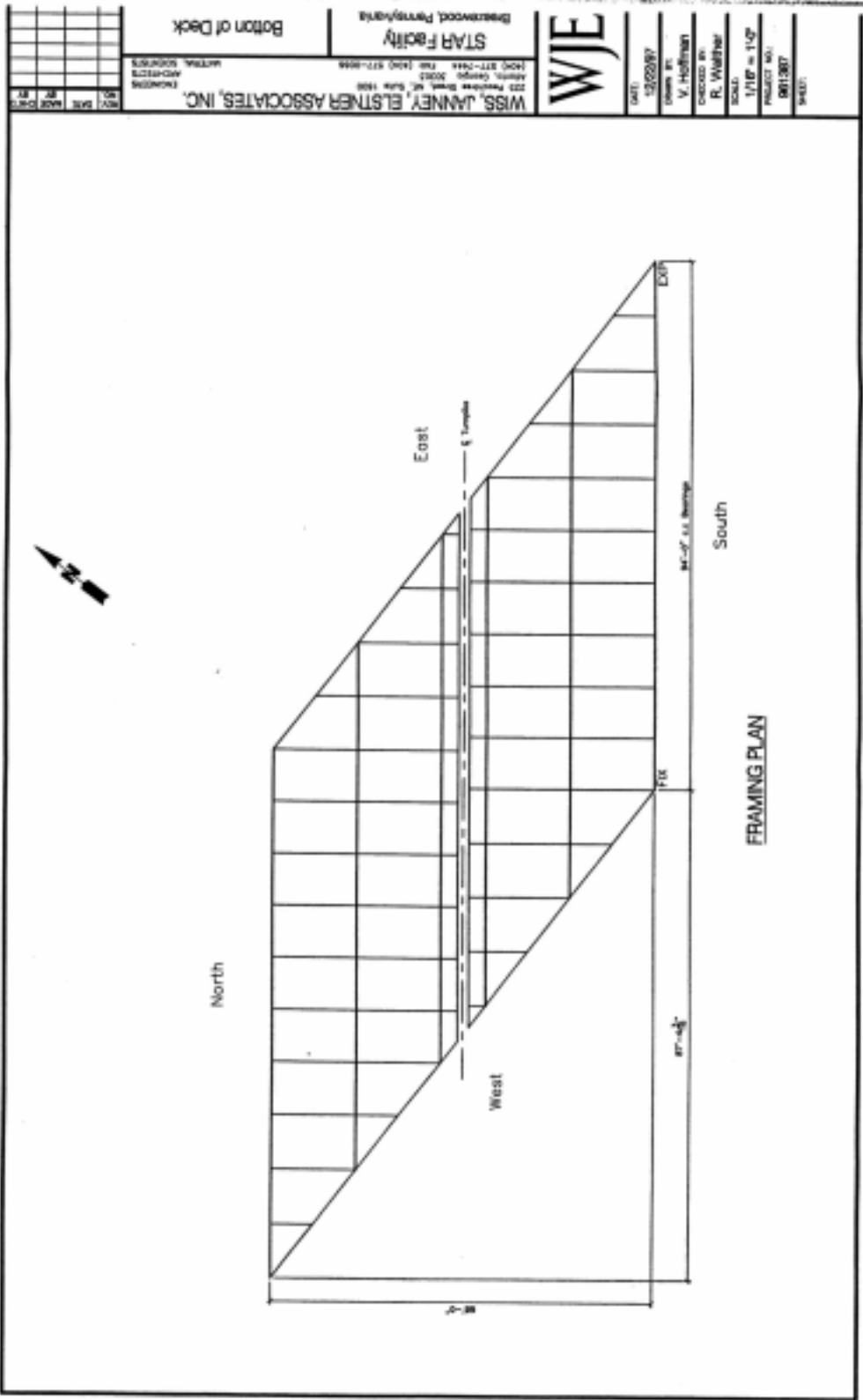
OVERALL SUBSTRUCTURE CONDITION RATING: N 9 8 7 6 5 4 3 2 1 0

Comments: _____

<u>Substructure Elements</u>				<u>Rating</u>								<u>Remarks</u>	
Abutments		N	9	8	7	6	5	4	3	2	1	0	
	Piles	N	9	8	7	6	5	4	3	2	1	0	
	Footing	N	9	8	7	6	5	4	3	2	1	0	
	Stem	N	9	8	7	6	5	4	3	2	1	0	
	Bearing Seat	N	9	8	7	6	5	4	3	2	1	0	
	Backwall	N	9	8	7	6	5	4	3	2	1	0	
	Wingwalls	N	9	8	7	6	5	4	3	2	1	0	
Piers and Bents		N	9	8	7	6	5	4	3	2	1	0	
	Piles	N	9	8	7	6	5	4	3	2	1	0	
	Footing	N	9	8	7	6	5	4	3	2	1	0	
	Columns/Stem	N	9	8	7	6	5	4	3	2	1	0	
	Cap	N	9	8	7	6	5	4	3	2	1	0	
		N	9	8	7	6	5	4	3	2	1	0	
		N	9	8	7	6	5	4	3	2	1	0	

Scour/Undermining _____
Settlement _____
Substructure Protection _____
Collision Damage _____
High-water Mark _____
Concrete Deterioration _____
Steel Corrosion _____
Paint _____

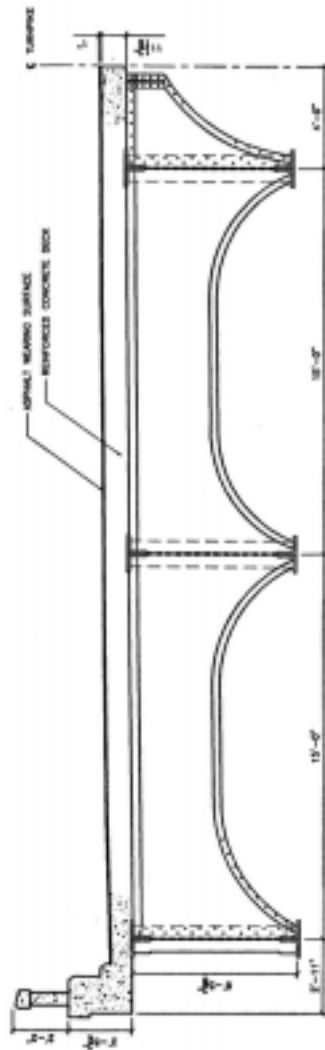
Notes: _____



DATE: 12/22/87	WJE	WIS. JANNEY, ELSTNER ASSOCIATES, INC.	NOV. DATE: 12/22/87
DRAWN BY: V. HOFFMAN	STAR Facility	220 Peachtree Street, NE, Suite 1808	NOV. DATE: 12/22/87
CHECKED BY: R. MATHIAS	Breastwood, Pennsylvania	Atlanta, Georgia 30303	NOV. DATE: 12/22/87
SCALE: 1/8" = 1'-0"		1400 877-0444 FAX 1400 877-0444	NOV. DATE: 12/22/87
PROJECT NO.: 8911387		ARCHITECTS	NOV. DATE: 12/22/87
SHEET: 001		ENGINEERS	NOV. DATE: 12/22/87
		STRUCTURAL ENGINEERS	NOV. DATE: 12/22/87
		NOV. DATE: 12/22/87	NOV. DATE: 12/22/87

1/2" = 1'-0" (VERTICAL)
1/4" = 1'-0" (HORIZONTAL)
SHEET SCALE: 1/4" = 1'-0"

HALF CROSS SECTION OF BRIDGE



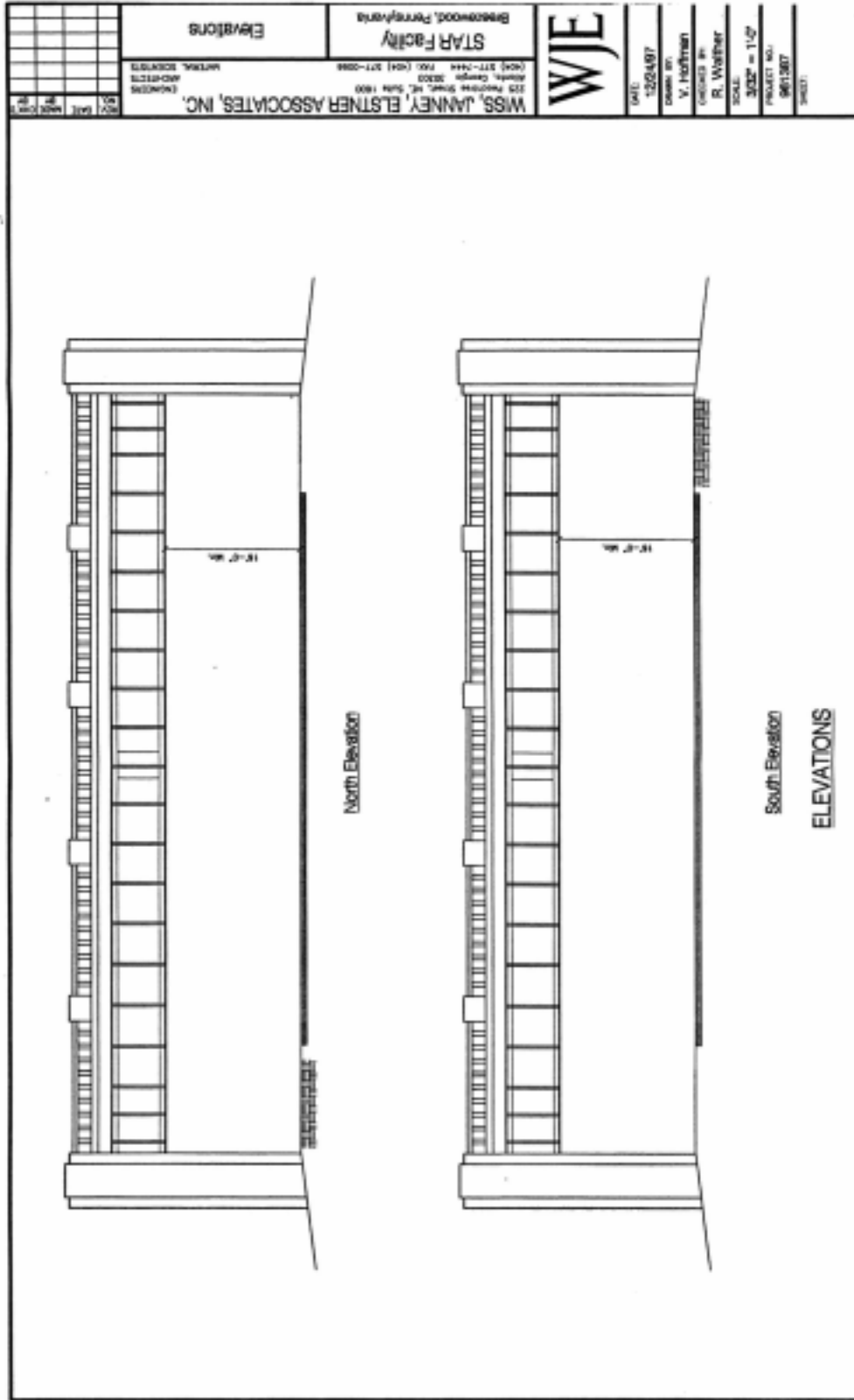
WJE

DATE: 12/18/97
 DRAWN BY: V. Hoffman
 CHECKED BY: R. Walling
 SCALE: 1/4" = 1'-0"
 PROJECT NO.: 981387
 SHEET:

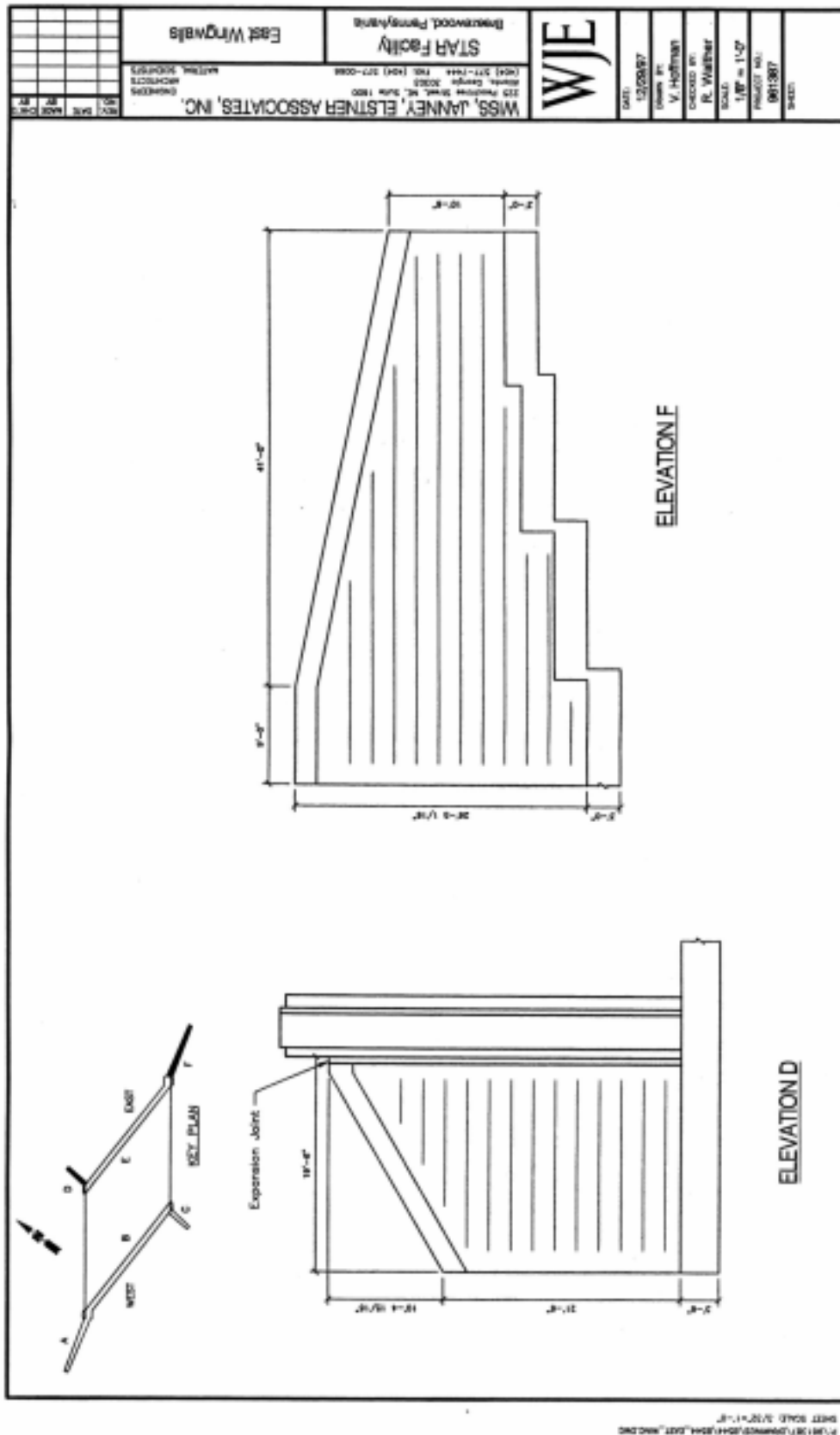
STAR Facility
 Broomfield, Pennsylvania
 WISS, JANNEY, ELSTNER ASSOCIATES, INC.
 125 Peachtree Street, Suite 1800
 Atlanta, Georgia 30305
 (404) 527-7444 FAX: (404) 527-0044
 PROJECT NO.: 981387

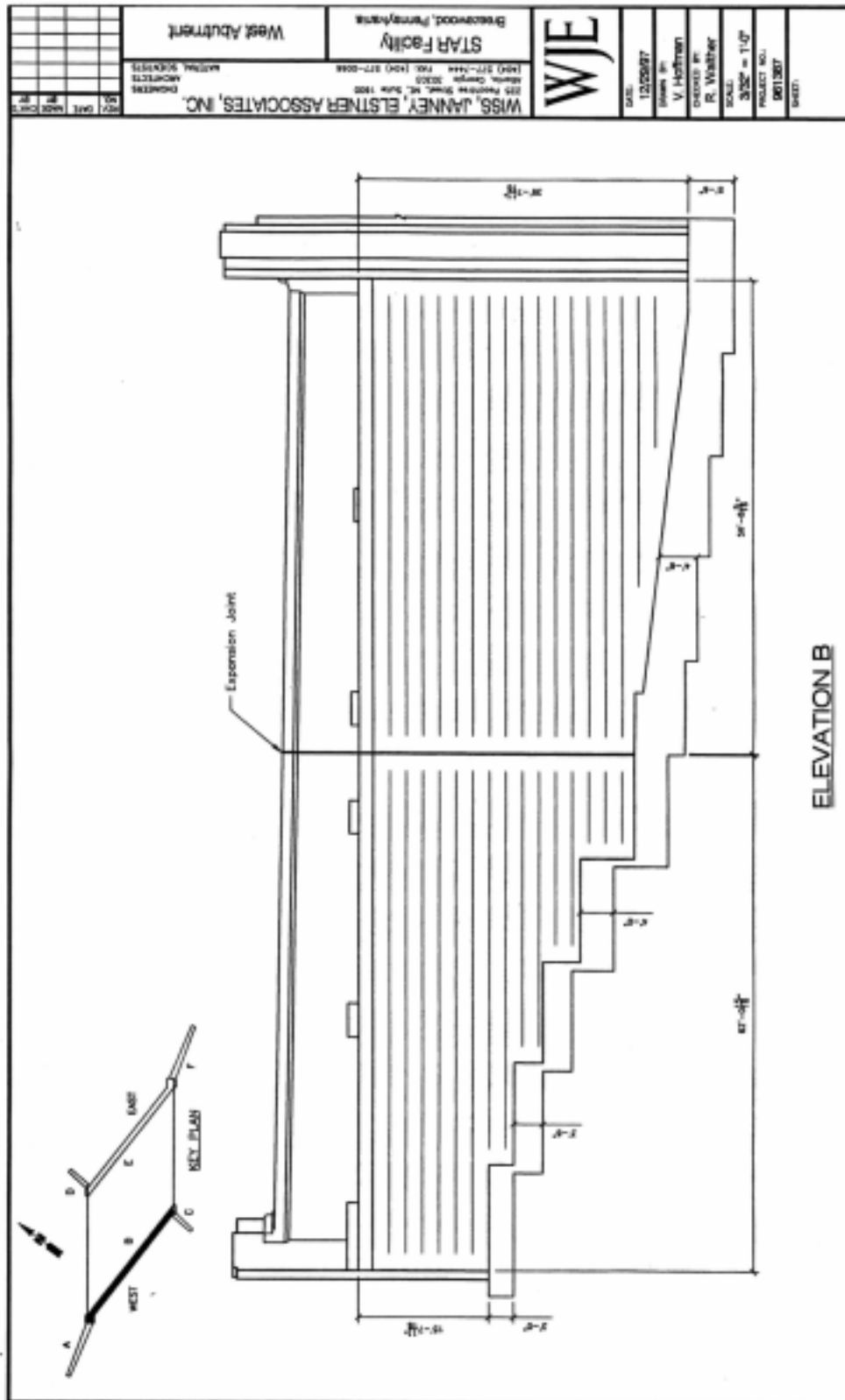
Half Cross Section
 PROJECT NO.: 981387
 SHEET:

NO.	DATE	DESCRIPTION
1	12/18/97	ISSUED FOR CONSTRUCTION

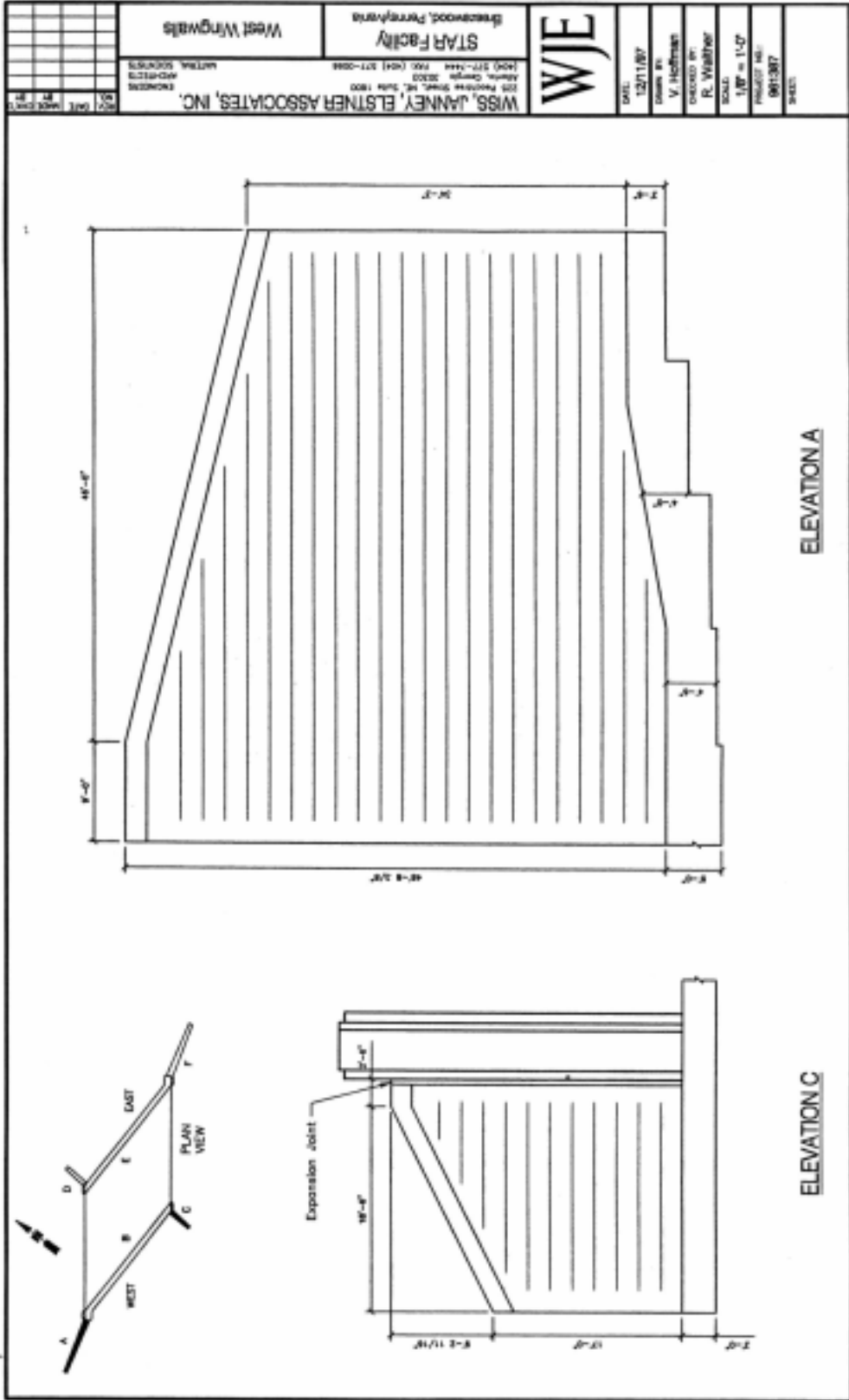


WJE	STAR Facility Breeseville, Pennsylvania 325 Peachtree Street, N.E., Suite 1800 Atlanta, Georgia 30303 (404) 527-2444 FAX: (404) 527-0988 ELEVATIONS ARCHITECTS NATIONAL ARCHITECTS	DATE: 12/24/97 DRAWN BY: V. Hoffman CHECKED BY: R. Wether SCALE: 3/32" = 1'-0" PROJECT NO.: 961387 SHEET:	MISS, JANNY, ELSTNER ASSOCIATES, INC. 325 Peachtree Street, N.E., Suite 1800 Atlanta, Georgia 30303 (404) 527-2444 FAX: (404) 527-0988 ELEVATIONS ARCHITECTS NATIONAL ARCHITECTS
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DATE: 12/20/07		DRAWN BY: V. Hoffman		CHECKED BY: R. Winkler		SCALE: 3/32" = 1'-0"		PROJECT NO.: 0601307		SHEET:	
WJE		STARR FACILITY		West Abutment		WISS, JANNEY, ELSTNER ASSOCIATES, INC.		ARCHITECTS		SHEET NO. 10	
125 Peachtree Street, NE, Suite 1800		Atlanta, Georgia 30303		(404) 377-1444 FAX: (404) 377-0044		205 Peachtree Street, NE, Suite 1800		Baltimore, Maryland 21202		(410) 528-1000 FAX: (410) 528-1001	



Task F

Task F

Task F

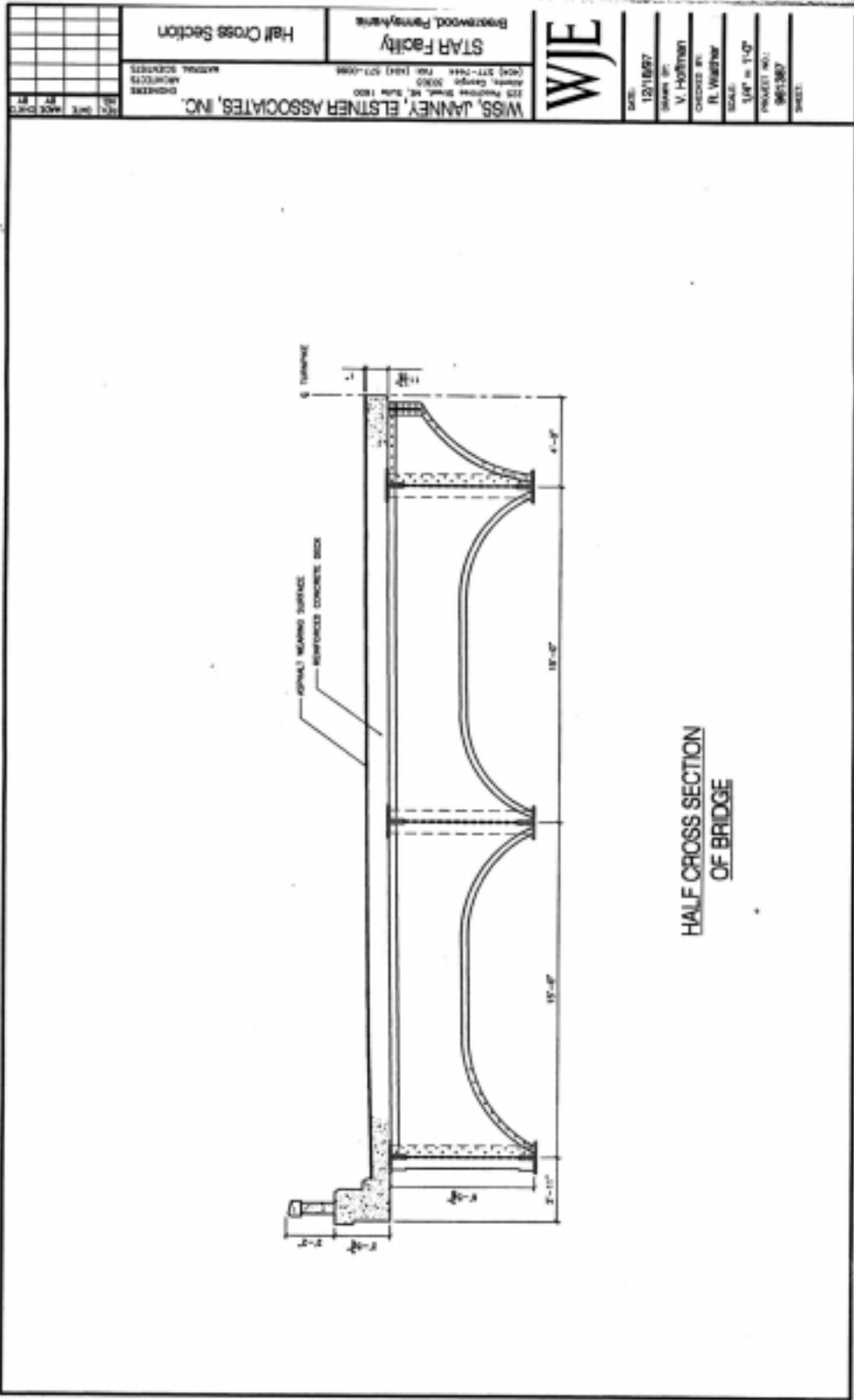
Task F

Task F

Task F

Task F

Task F



HALF CROSS SECTION
OF BRIDGE

WJE

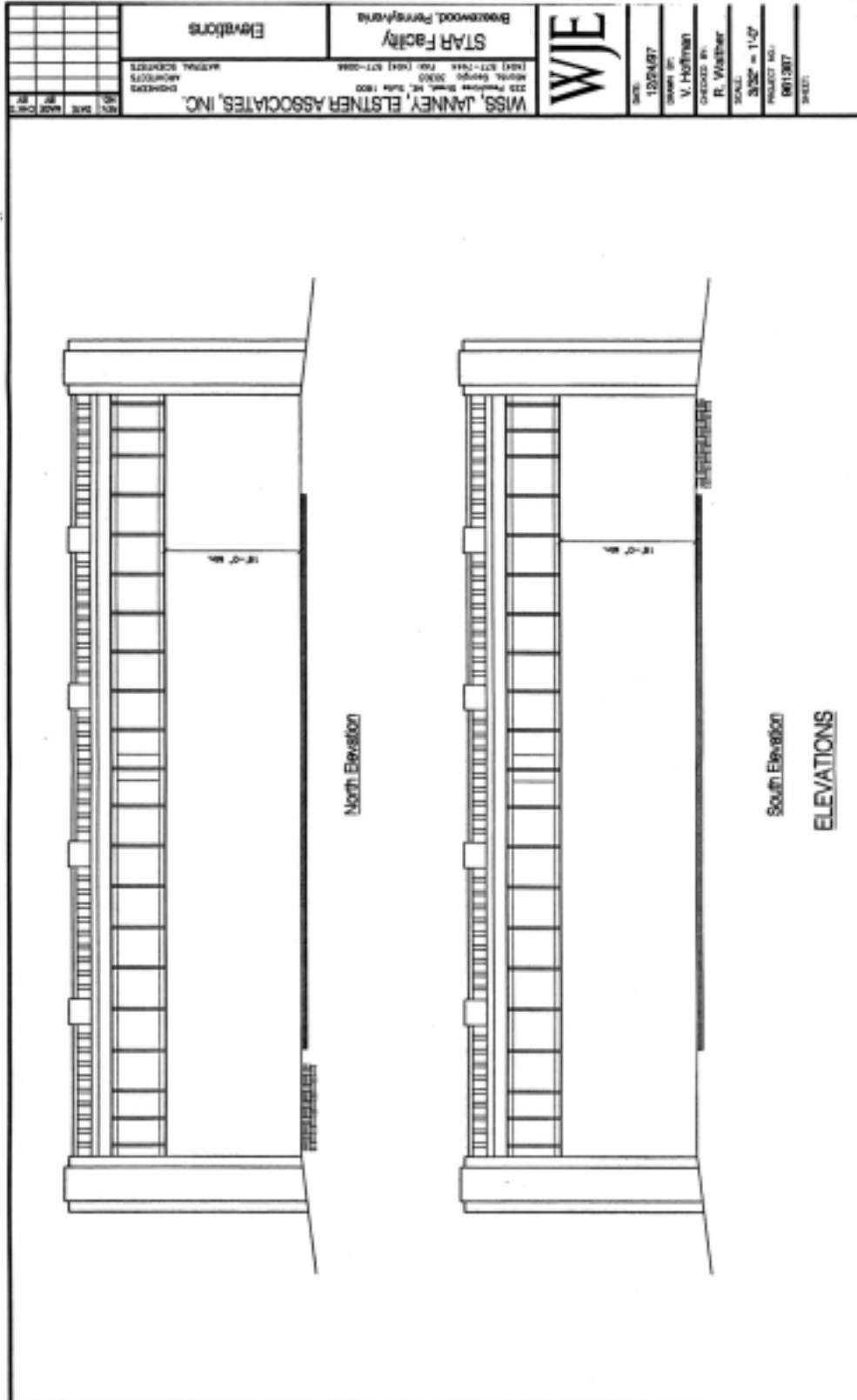
STAR Facility
Brimwood, Pennsylvania

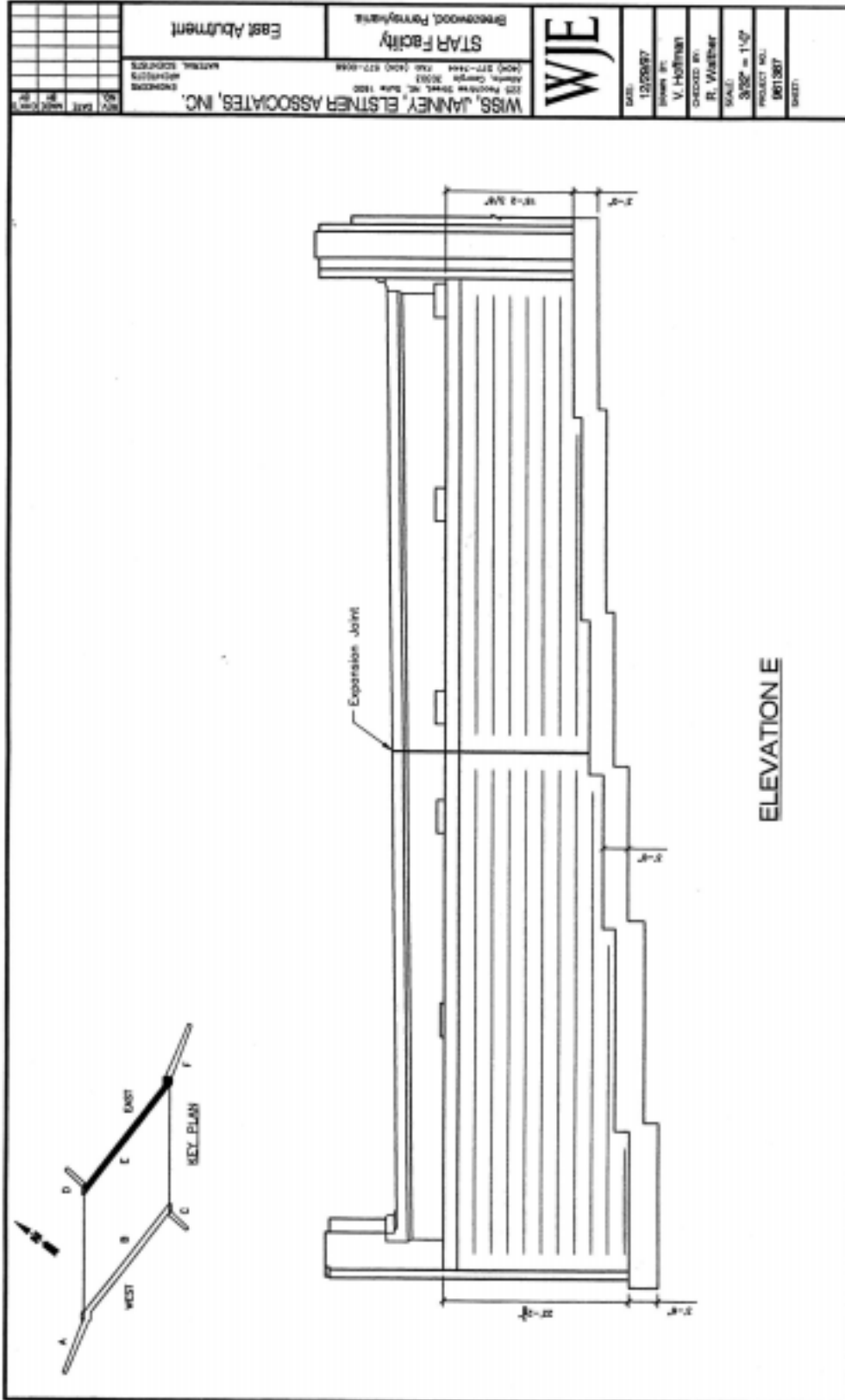
Half Cross Section

DATE	12/15/97
DRAWN BY	V. HORTON
CHECKED BY	R. WIEBER
SCALE	1/4" = 1'-0"
PROJECT NO.	961307
SHEET	

WISS, JANNEY, ELSTNER ASSOCIATES, INC.
125 Washington Blvd., Suite 1100
Aston, Pennsylvania 19008
(610) 377-7444 FAX (610) 377-0088
CONCRETE
REINFORCED
MATERIAL SPECIFICATIONS

1/4" = 1'-0" SCALE
SECTION 200





Task G

Task G

Task G

Task G

Task G

Task G

Task G

Task G

TASK G

Route 1 Bridge

Comments: _____

[illegible]

Inspector ID:

Date:

TASK G
Route 1 Bridge

OVERALL SUPERSTRUCTURE CONDITION RATING: N 9 8 7 6 5 4 3 2 1 0

Comments: _____

<u>Superstructure Elements</u>	<u>Rating</u>											<u>Remarks</u>
Stringers	N	9	8	7	6	5	4	3	2	1	0	
Floorbeams	N	9	8	7	6	5	4	3	2	1	0	
Floor System Bracing	N	9	8	7	6	5	4	3	2	1	0	
Multibeams	N	9	8	7	6	5	4	3	2	1	0	
Girders	N	9	8	7	6	5	4	3	2	1	0	
Arches	N	9	8	7	6	5	4	3	2	1	0	
Cables	N	9	8	7	6	5	4	3	2	1	0	
Paint	N	9	8	7	6	5	4	3	2	1	0	
Bearing Devices	N	9	8	7	6	5	4	3	2	1	0	
Connections	N	9	8	7	6	5	4	3	2	1	0	
Welds	N	9	8	7	6	5	4	3	2	1	0	
	N	9	8	7	6	5	4	3	2	1	0	
	N	9	8	7	6	5	4	3	2	1	0	

Timber Decay _____
Concrete Deterioration _____
Steel Corrosion _____
Collision Damage _____
LL Deflection _____
Vibration _____
Member Alignment _____
Utilities _____

Notes: _____

Inspector ID:

Date:

TASK G
Route 1 Bridge

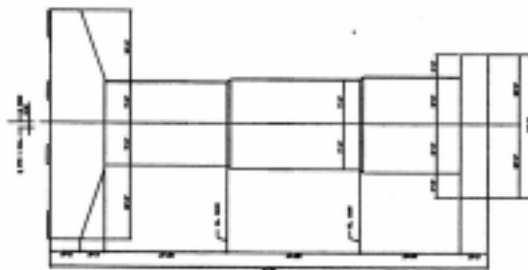
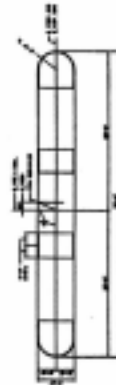
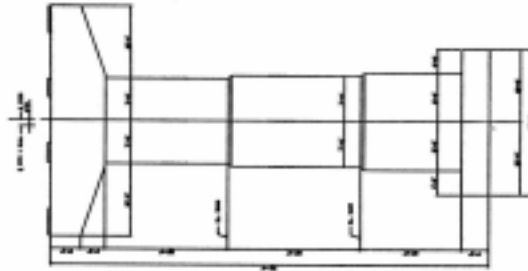
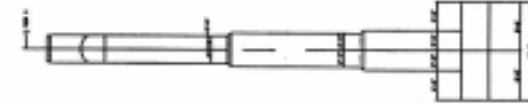
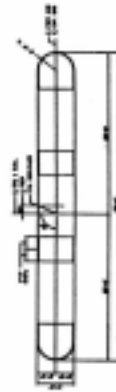
OVERALL SUBSTRUCTURE CONDITION RATING: N 9 8 7 6 5 4 3 2 1 0

Comments: _____

<u>Substructure Elements</u>				<u>Rating</u>								<u>Remarks</u>	
Abutments		N	9	8	7	6	5	4	3	2	1	0	
	Piles	N	9	8	7	6	5	4	3	2	1	0	
	Footing	N	9	8	7	6	5	4	3	2	1	0	
	Stem	N	9	8	7	6	5	4	3	2	1	0	
	Bearing Seat	N	9	8	7	6	5	4	3	2	1	0	
	Backwall	N	9	8	7	6	5	4	3	2	1	0	
	Wingwalls	N	9	8	7	6	5	4	3	2	1	0	
Piers and Bents		N	9	8	7	6	5	4	3	2	1	0	
	Piles	N	9	8	7	6	5	4	3	2	1	0	
	Footing	N	9	8	7	6	5	4	3	2	1	0	
	Columns/Stem	N	9	8	7	6	5	4	3	2	1	0	
	Cap	N	9	8	7	6	5	4	3	2	1	0	
		N	9	8	7	6	5	4	3	2	1	0	
		N	9	8	7	6	5	4	3	2	1	0	

Scour/Undermining _____
Settlement _____
Substructure Protection _____
Collision Damage _____
High-water Mark _____
Concrete Deterioration _____
Steel Corrosion _____
Paint _____

Notes: _____

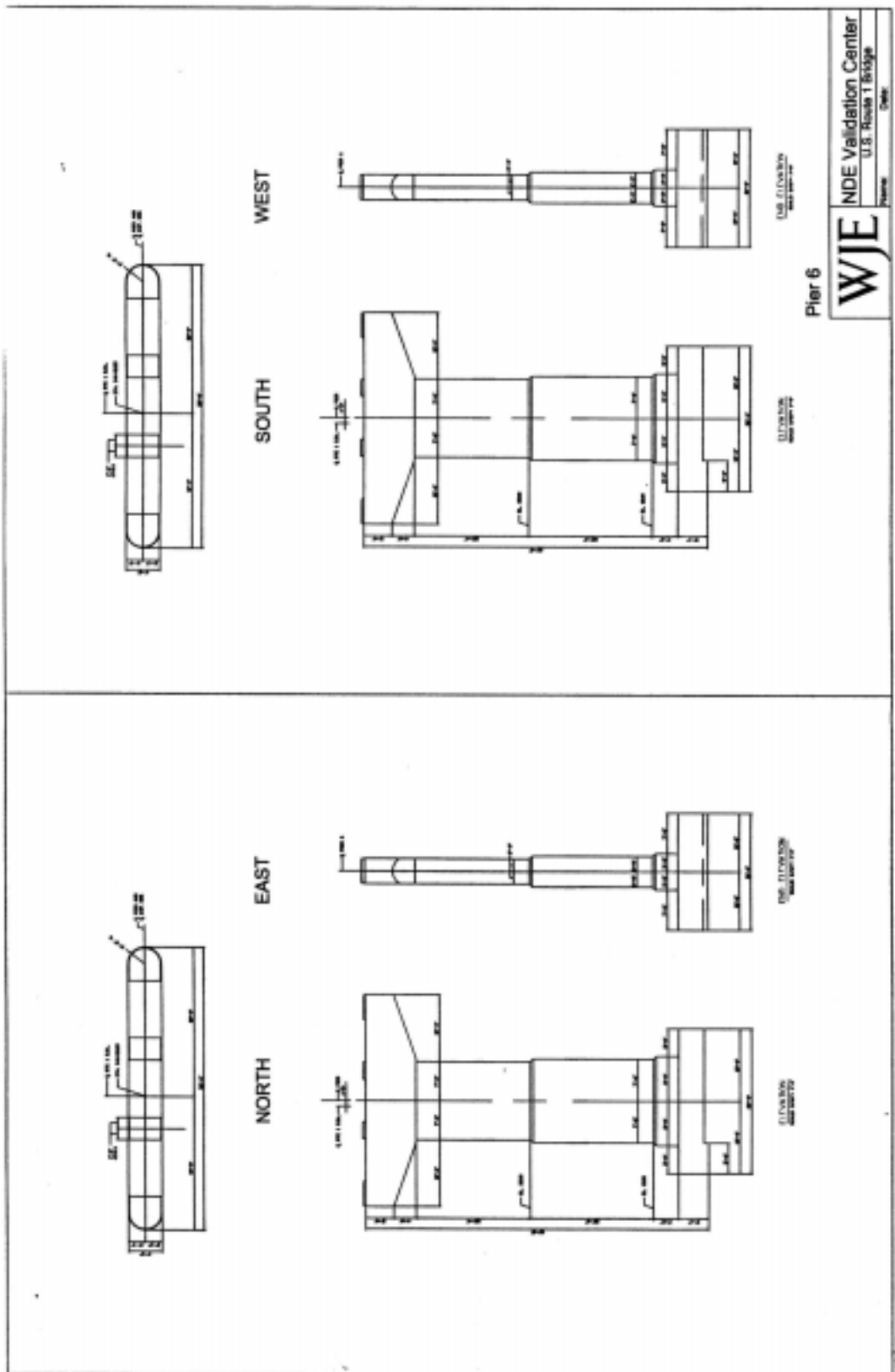


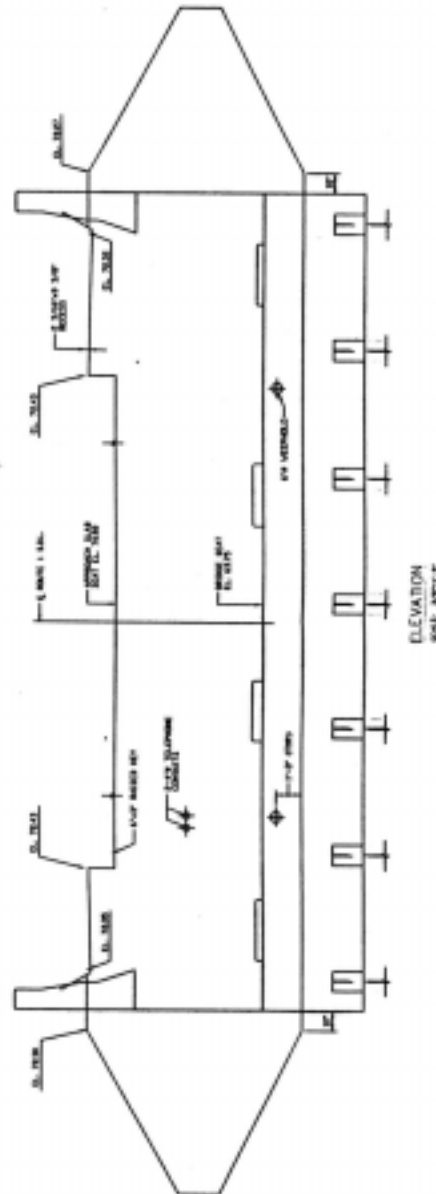
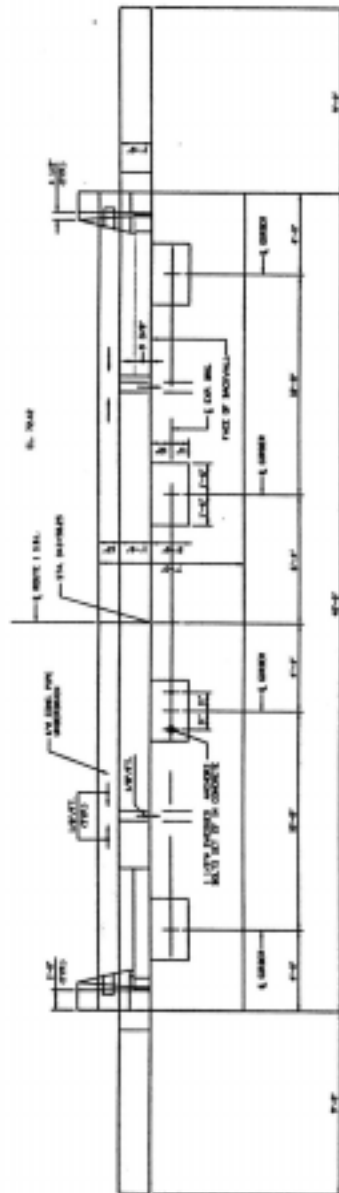
Pier 5

WJE

NDE Validation Center
U.S. Route 1 Bridge

C. 400





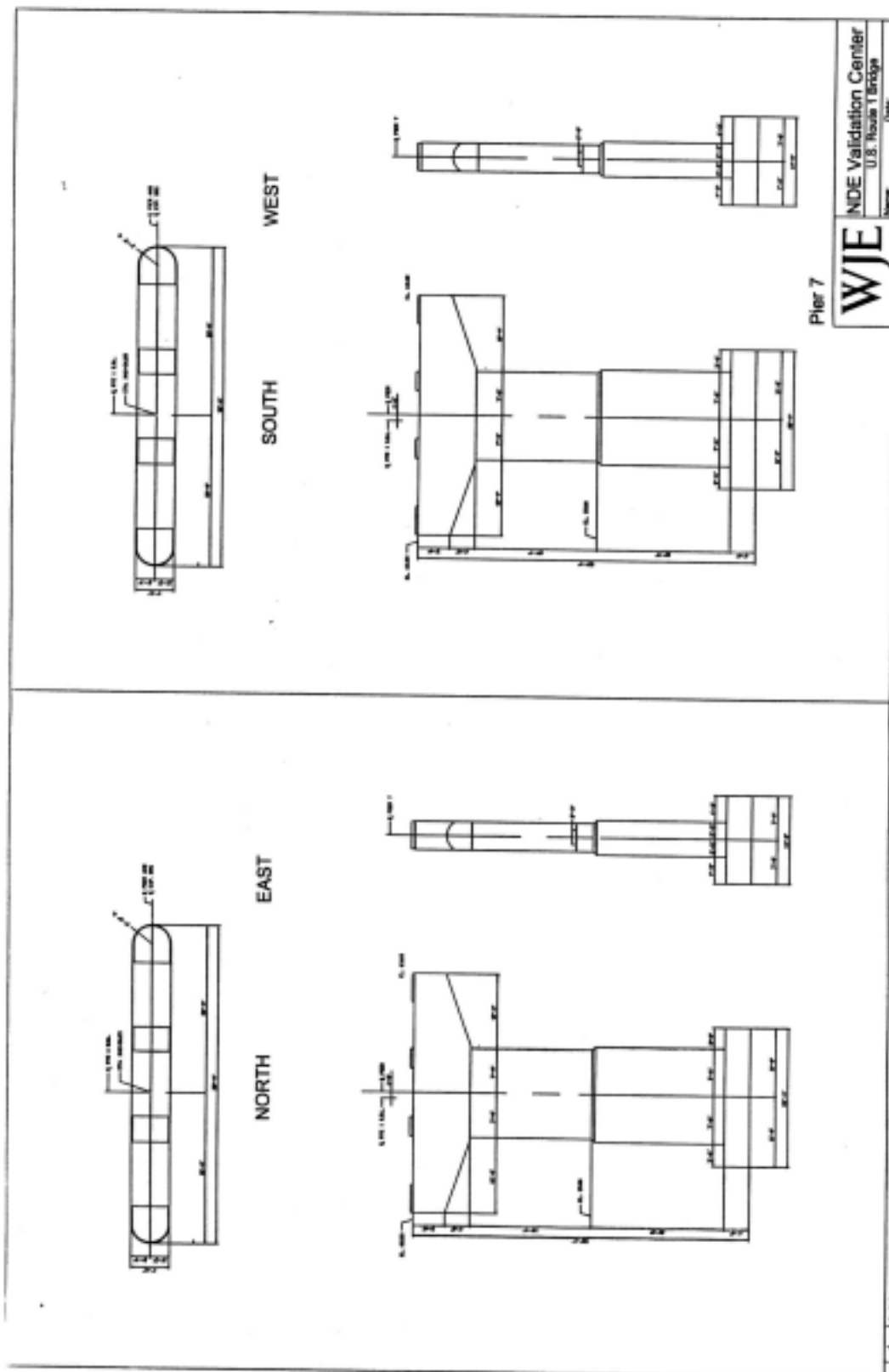
Abutment B

WJE

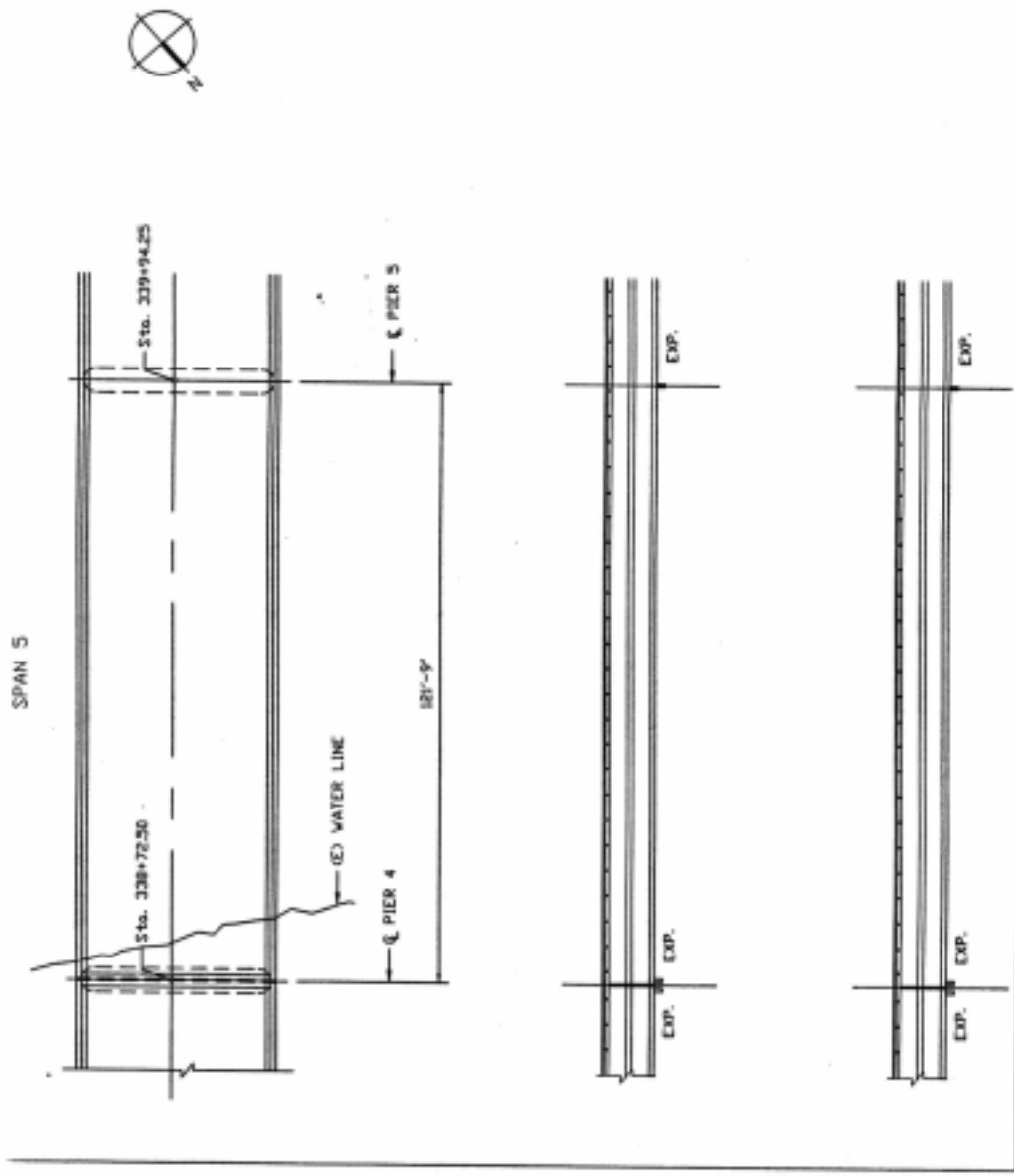
NDE Validation Center
U.S. Route 1 Bridge

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107



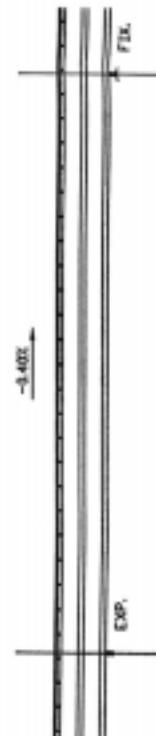
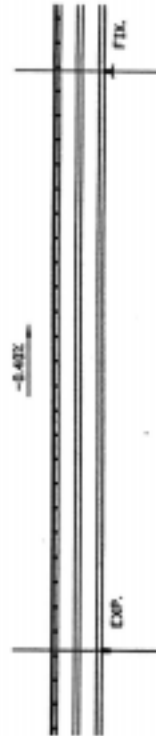
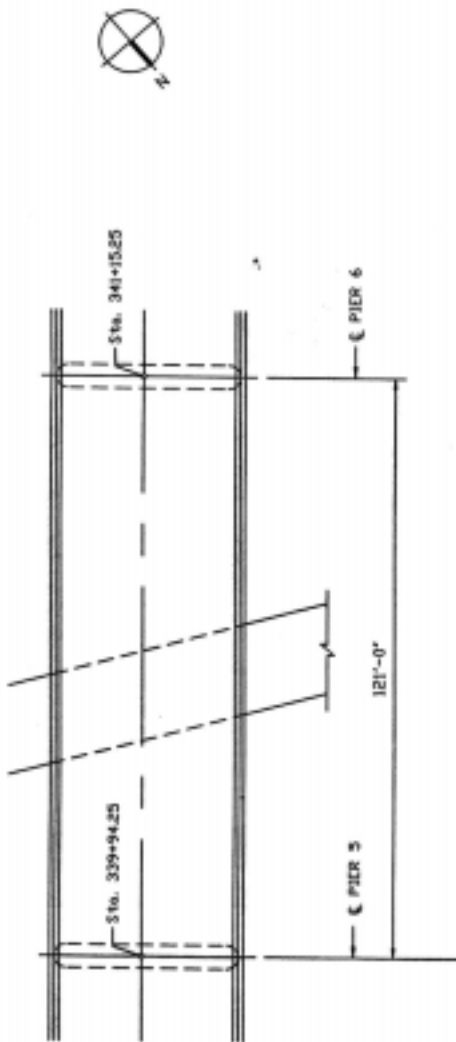
Notes:



etc 11

Notes:

SPAN 6



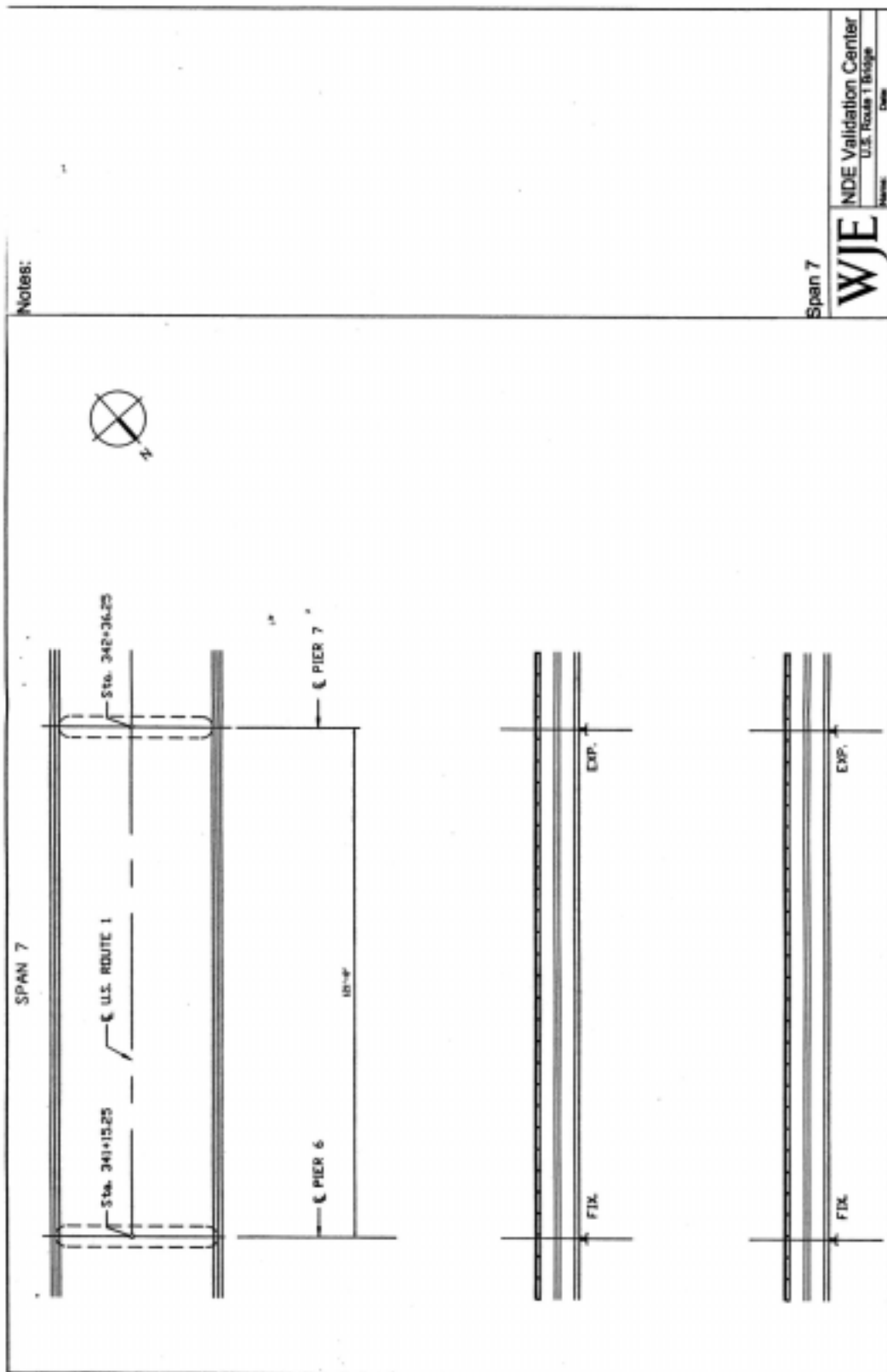
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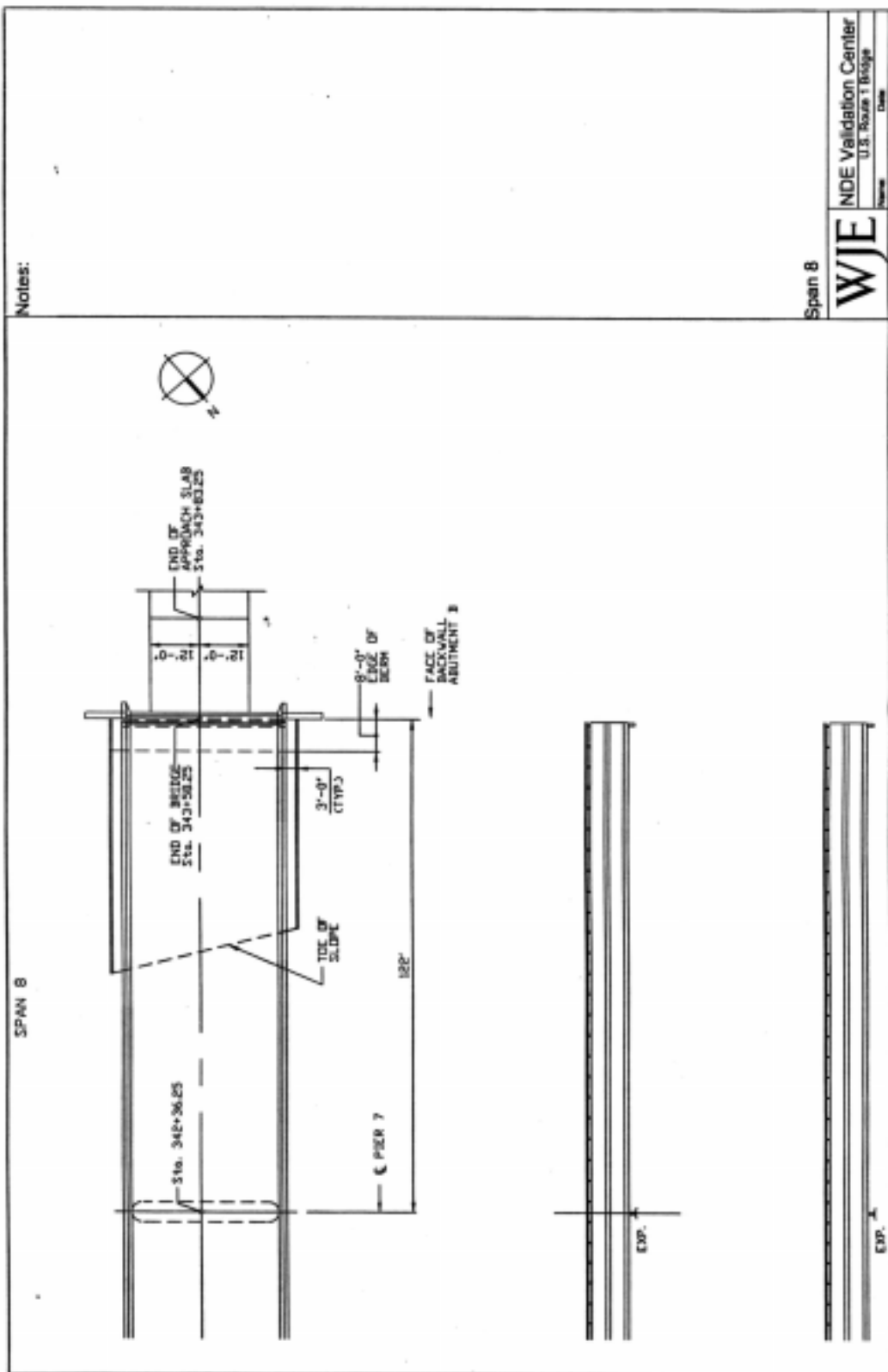
WJE

NDE Validation Center
U.S. Route 1 Bridge

Name _____ Date _____

01/18





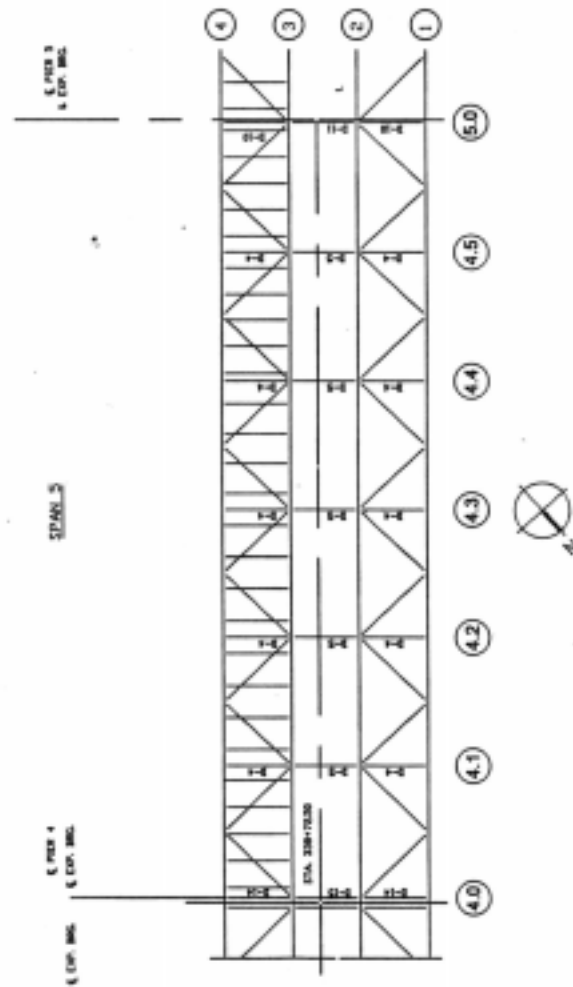
Notes:

Span 5

WJE

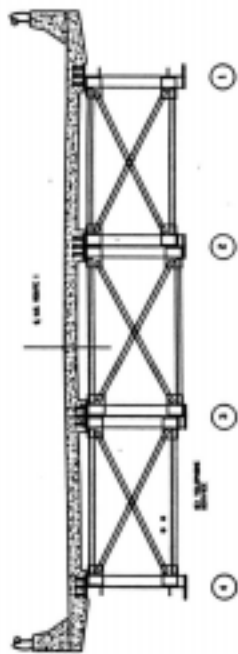
NDE Validation Center
U.S. Route 1 Bridge

Date:

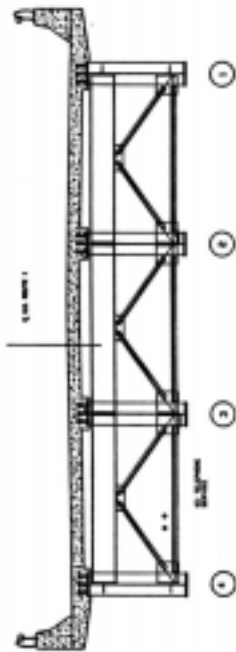


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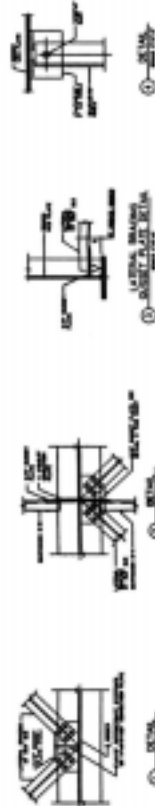
Notes:



TYPICAL SECTION AT MID-SPAN



TYPICAL SECTION AT PIER NO. 4 AND ABUTMENT 8



Span

WJE

NDE Validation Center
U.S. Route 1 Bridge

Name _____ Date _____

nd 15

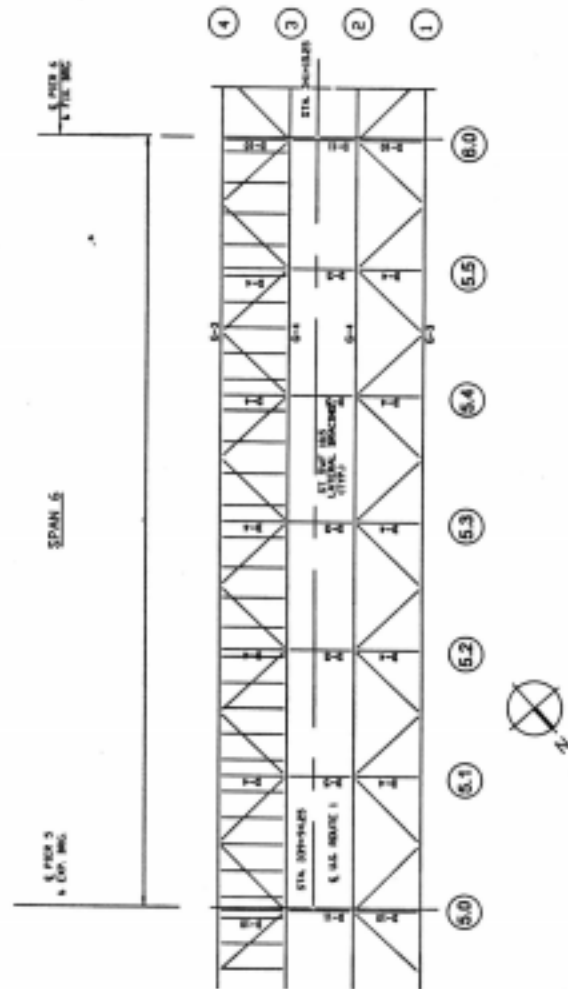
Notes:

Span 6

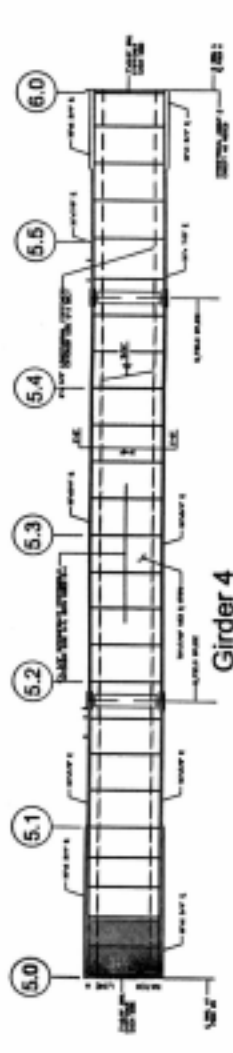
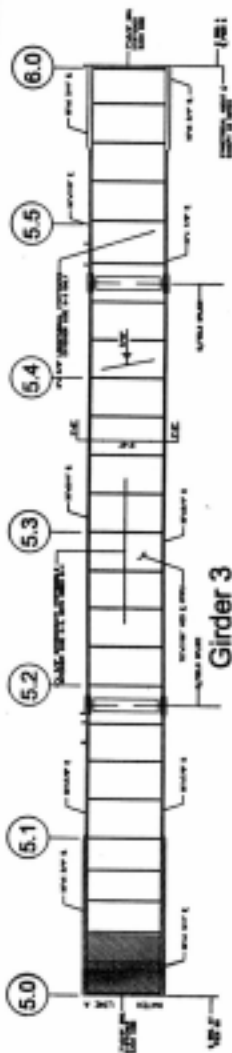
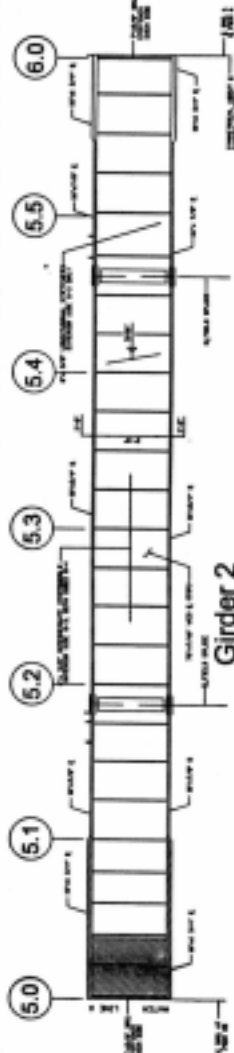
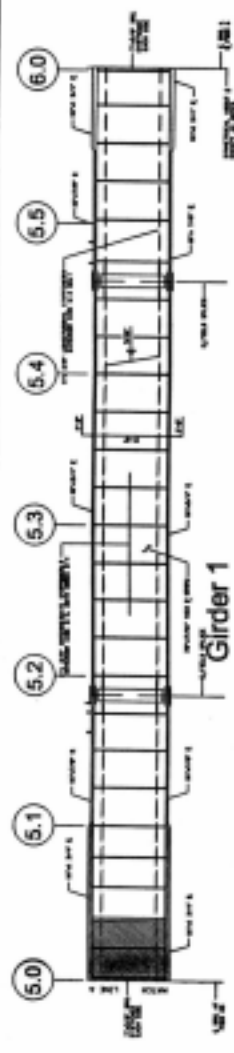
WJE

NDE Validation Center
U.S. Route 1 Bridge

Drawn: _____ Date: _____



Notes:



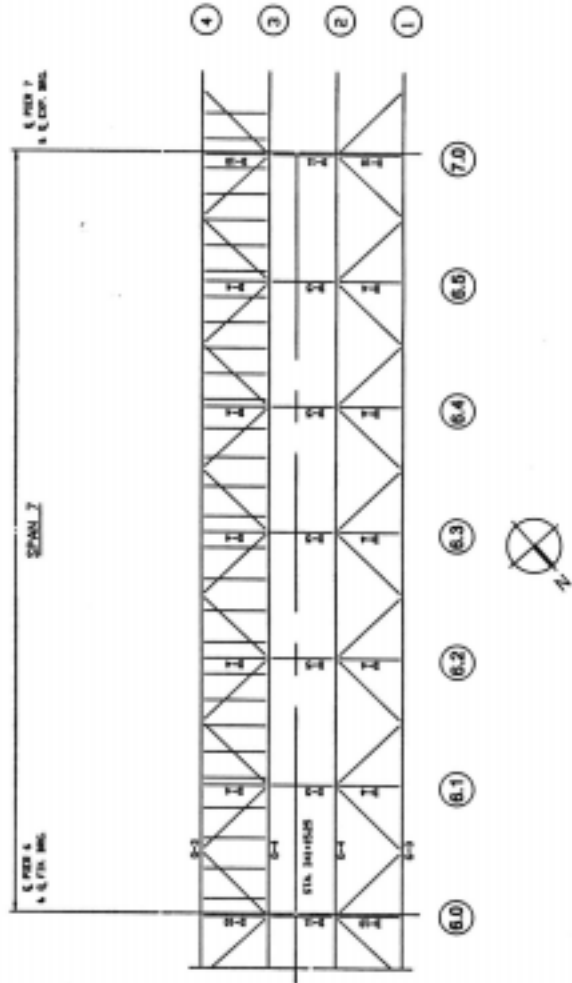
Span 6

WJE

NDE Validation Center
U.S. Route 1 Bridge
Name: _____
Date: _____

ndp 13

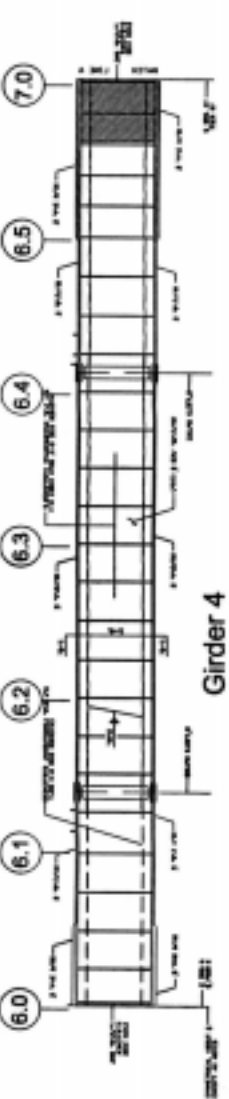
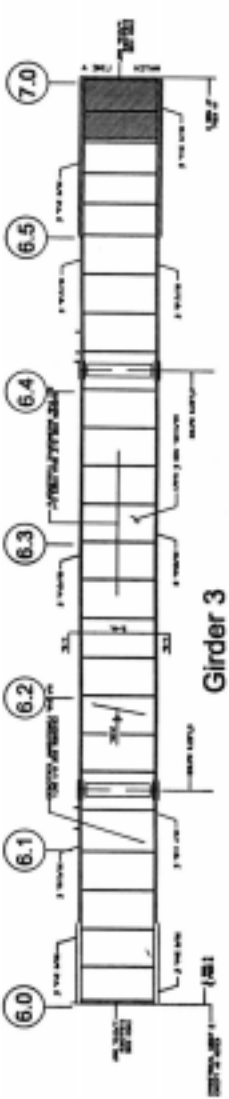
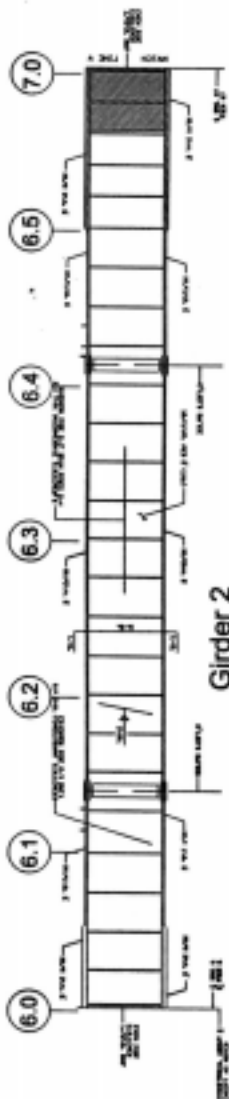
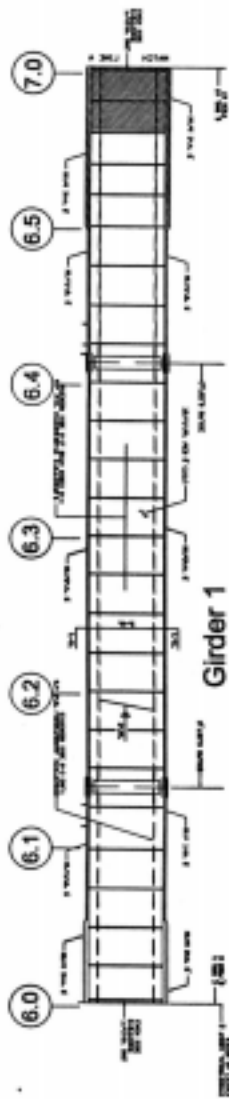
Notes:



Span 7

WJE
 NDE Validation Center
 U.S. Route 1 Bridge
 Name: _____ Date: _____

Notes:

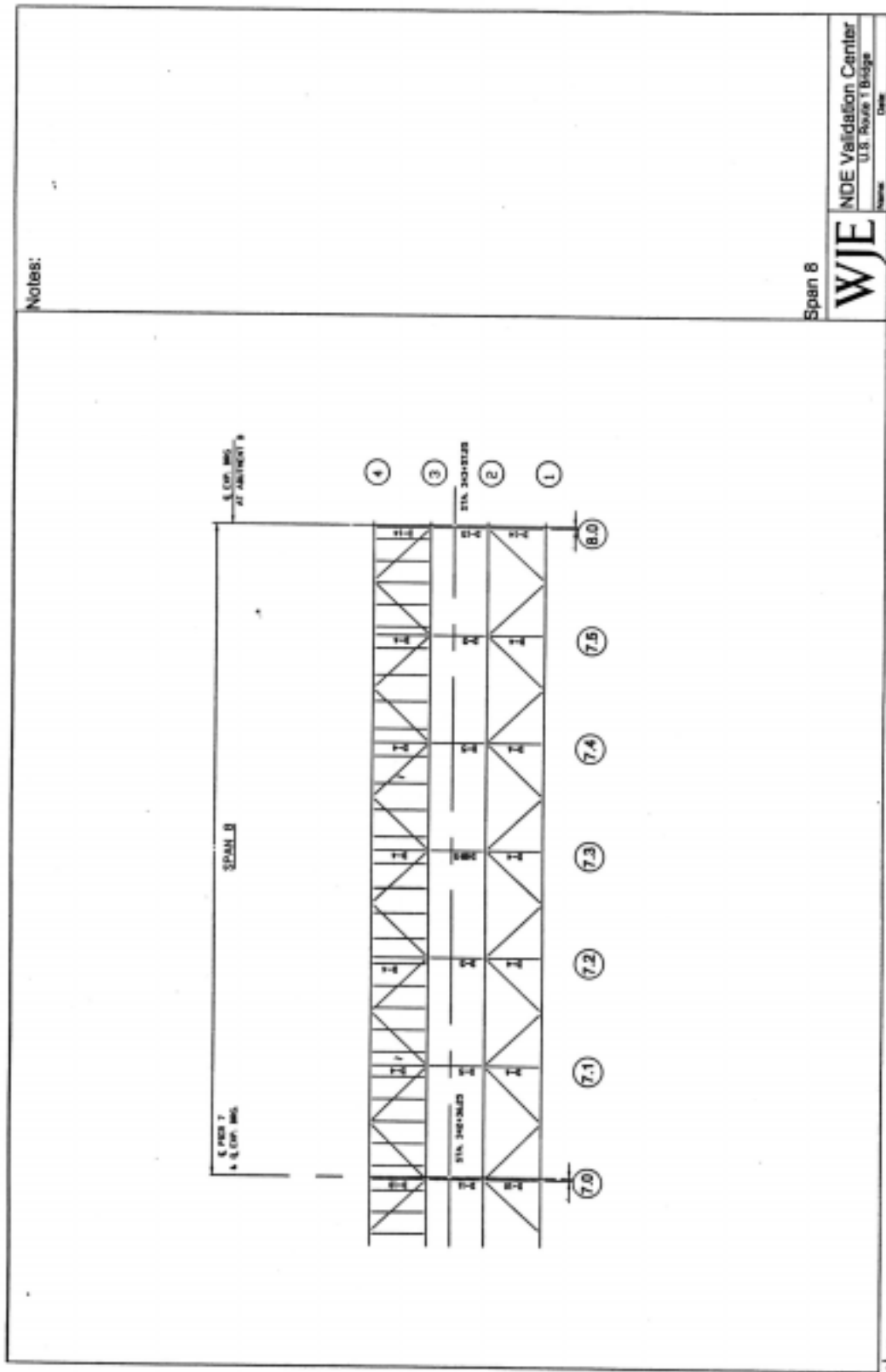


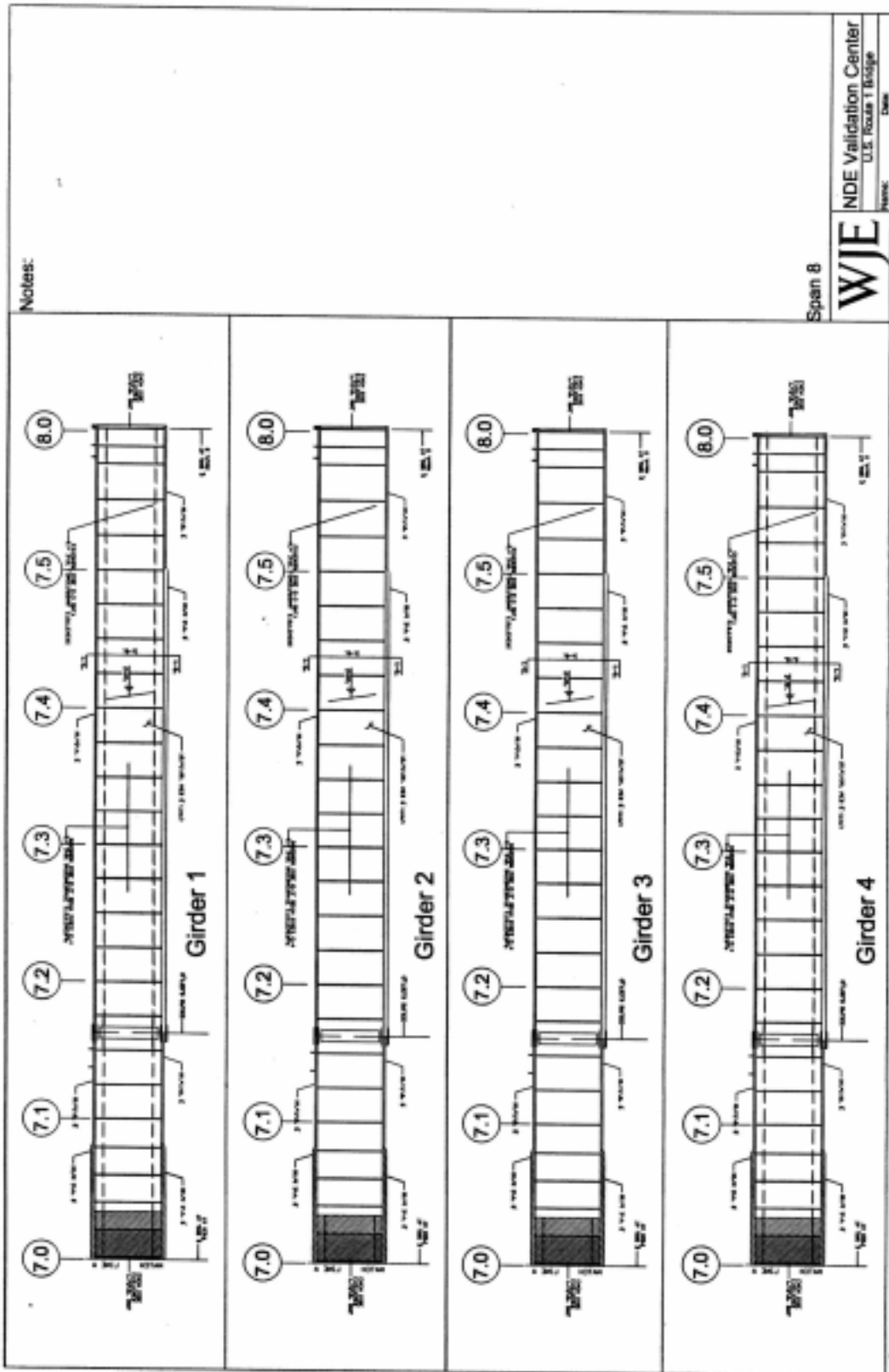
Span 7

WJE

NDE Validation Center
U.S. Route 1 Bridge
Name _____ Date _____

6/6/16





Task H

Task H

Task H

Task H

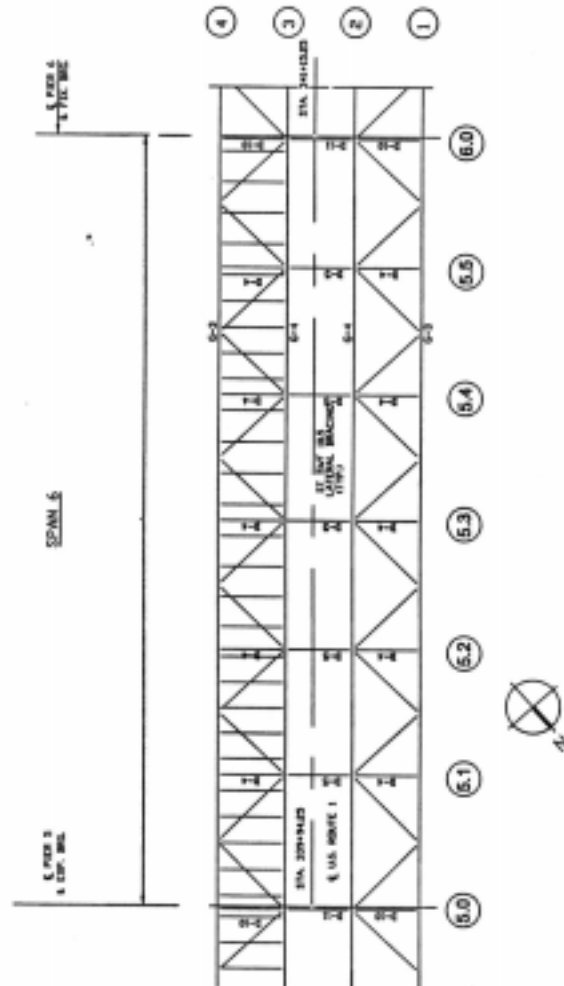
Task H

Task H

Task H

Task H

Notes:



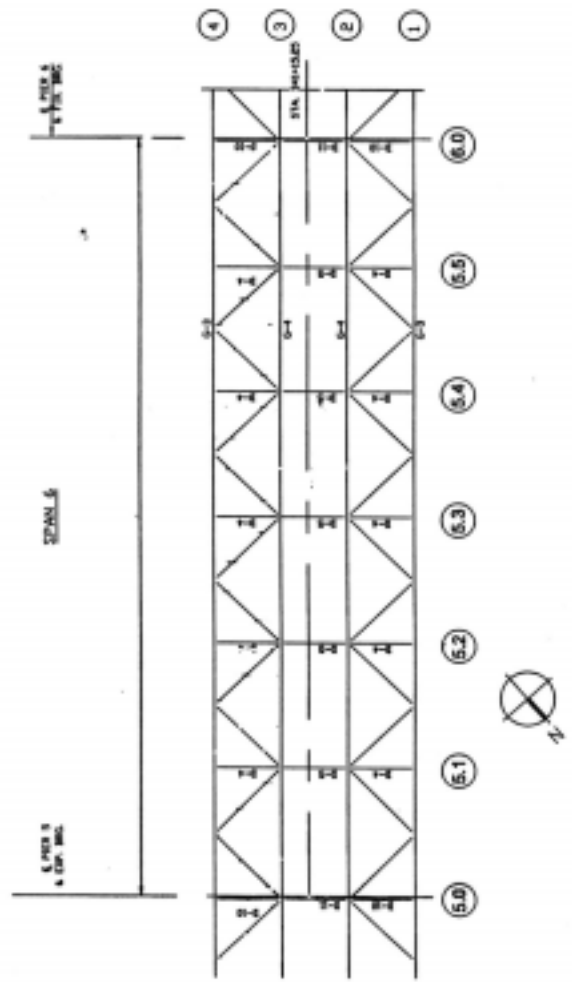
Span 6

WJE

NDE Validation Center
U.S. Route 1 Bridge

Date

Notes:

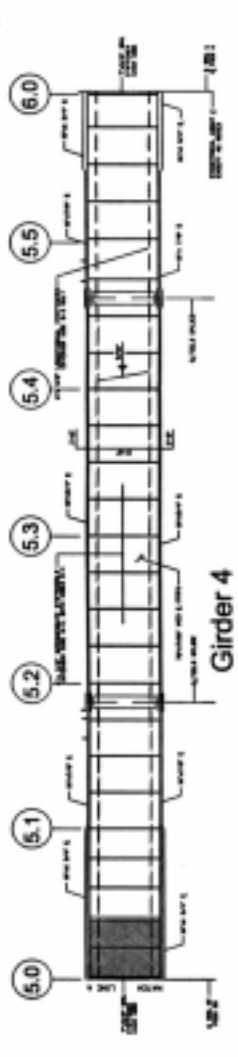
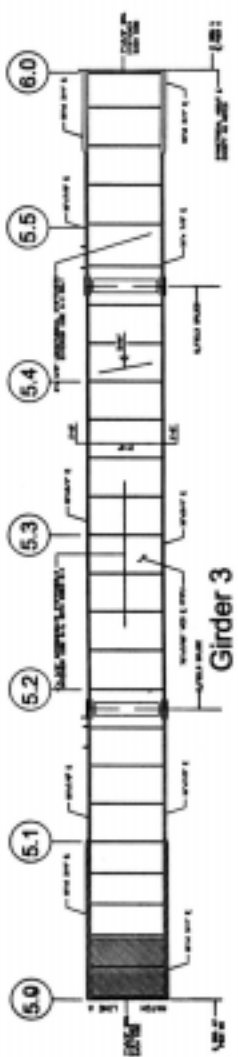
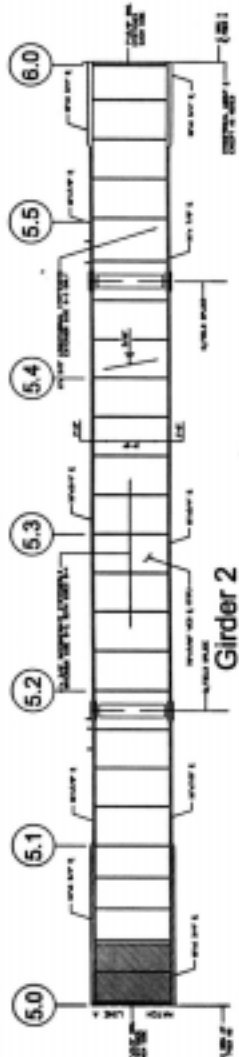
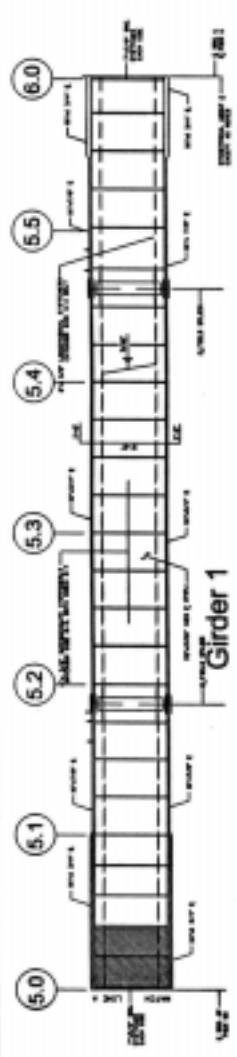


Span 6

WJE
 NDE Validation Center
 U.S. Route 1 Bridge
 Name: _____ Date: _____



Notes:



Span 6

WJE

NDE Validation Center
U.S. Route 1 Bridge

note 13

Task J

Task J

Task J

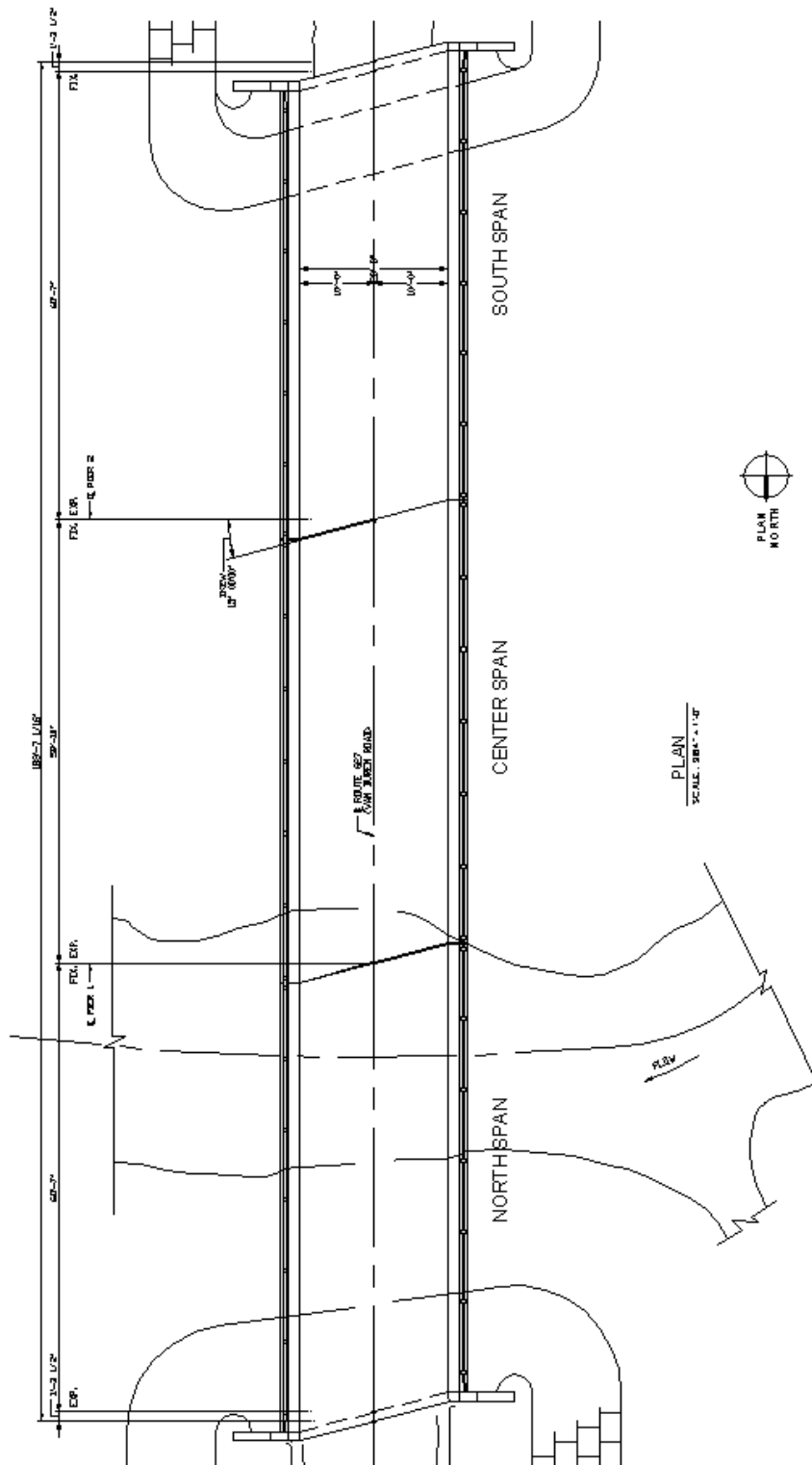
Task J

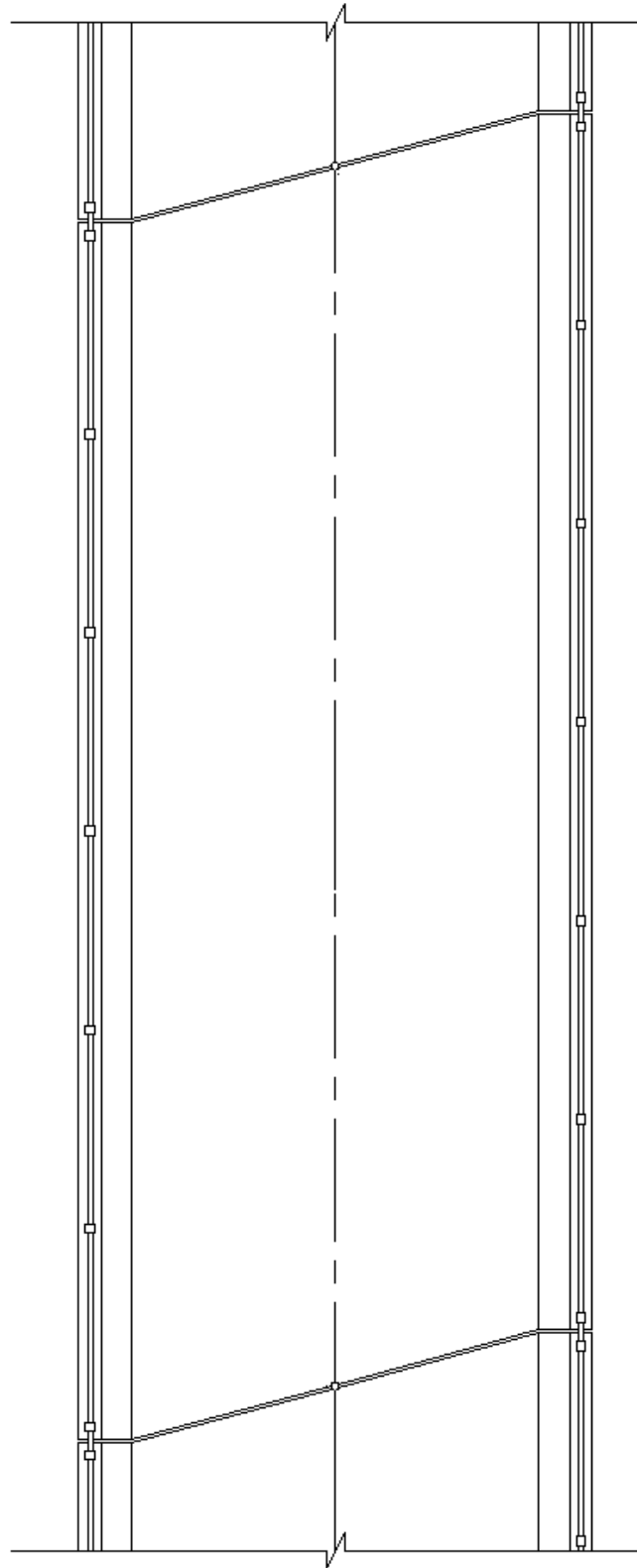
Task J

Task J

Task J

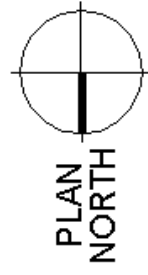
Task J

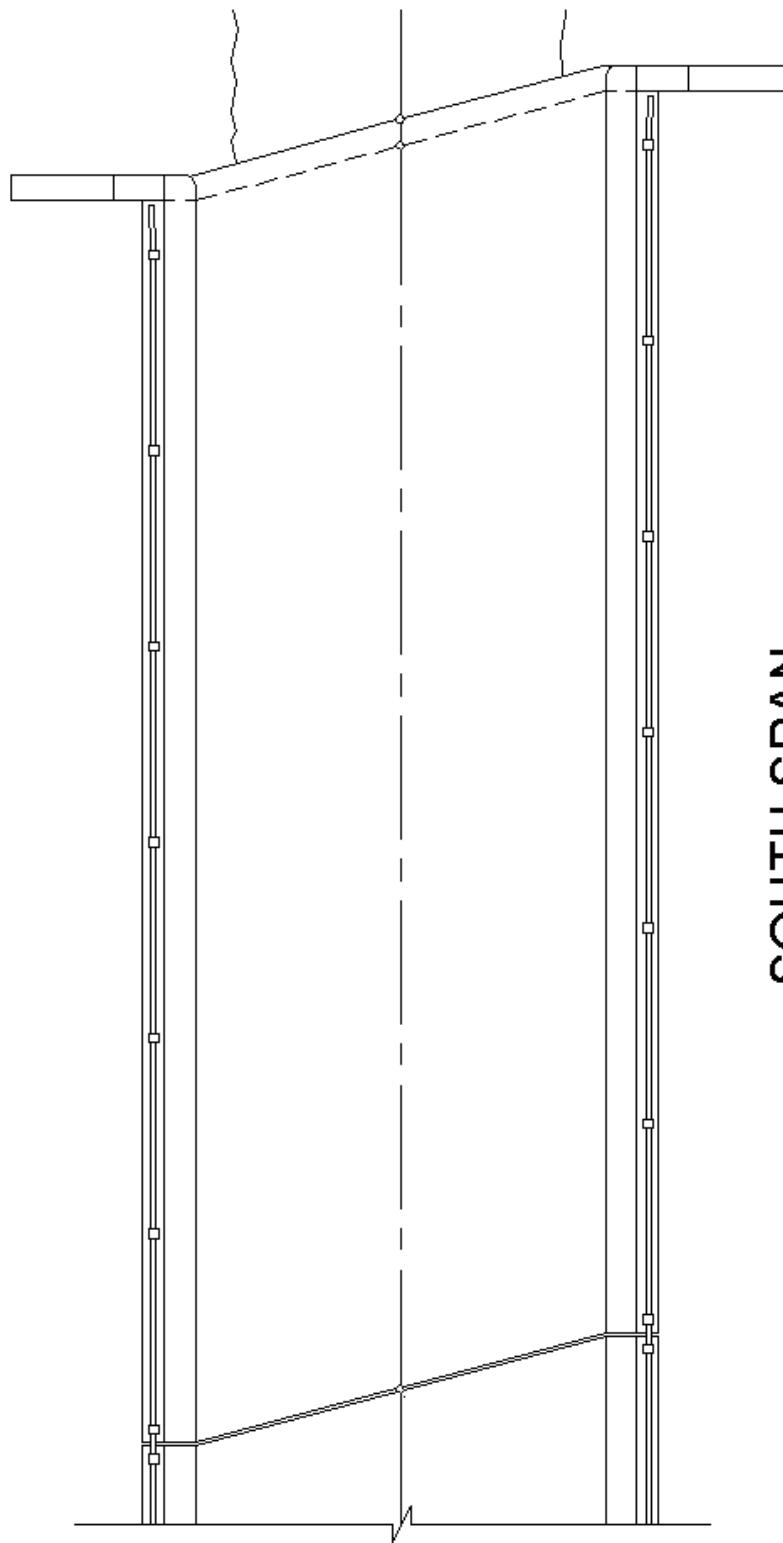




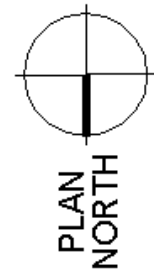
CENTER SPAN

PLAN
SCALE: 1/8" = 1'-0"





SOUTH SPAN



PLAN
SCALE: 1/8" = 1'-0"